



UTILITY ASSESSMENT REPORT

for

Manchester Metropolitan University

**Development at
Ryebank Road
Chorlton**

Prepared By
Fuel Solutions UK Limited

June 2020



| Section | Page |
|--|-------------|
| 1.0 Executive Summary | 2 |
| 1.1 Constraints to development | 2 |
| 1.1 Existing utility apparatus | 2-4 |
| 1.2 New utility infrastructure | 5-6 |
| 2.0 Existing utility apparatus assessment & comments | 7 |
| 2.1 Area under consideration for utility records searches | 8 |
| 2.2 Utility searches results schedule | 9 |
| 2.3 Electric (ENW) | 10-11 |
| 2.4 Gas (Cadent) | 12-14 |
| 2.5 United Utilities Water (Potable) | 15-17 |
| 2.6 Openreach | 18 |
| 3.0 Description of the new development proposals | 19-22 |
| 3.1 Utility loadings | 23 |
| 3.2 Points of Connection | 24-27 |
| 3.3 New utility networks | 28-31 |
| 4.0 Appendices | 32 - |



1. Executive Summary

Fuel Solutions (UK) Limited have been appointed by Manchester Metropolitan University to provide a utilities assessment incorporating:

- A utility records search with particular consideration and comment given to the possible constraints to development of existing utility apparatus located within and/or at the proposed new access points for the potential development land and
- Assessment of any constraints to the provision of new utility infrastructure to enable the development of the land for domestic dwelling use. Reference has been made to Cushman & Wakefield Development Framework prepared on behalf of Manchester Metropolitan University dated June 2019. For the purposes of this report it has been assumed that there will be two distinct development plots. Please refer to section 1.2 for details.

1.1 Constraints to development

Existing Utility Apparatus

Table 1.1. Utility Apparatus constraining development

| Utility | Apparatus | Location | Cost for diversions / Isolation & Lead times |
|------------------------|---------------------------|---|--|
| Cadent Gas | 610m diameter IP gas main | Within North and South development plot and at both North and South access location | £12,000 Feasibility study £30,000 Detailed Design £500,000 + 20% contingency for diversion. Lead time 6 months for design 12 months for construction |
| Cadent Gas | 2" PE LP Service | Within South development plot to old sports pavilion | £4,000 for isolation of the service in Longford Road |
| Electricity North West | LV Service | Within South development plot to old sports pavilion | £2,000 for isolation in Longford Road. |
| Electricity North West | 3 x LV mains | Longford Road site entrance in existing road | £10,000 if affected to lower. |
| Openreach Telecom | Duct route shown | Within South development plot to old sports pavilion | Free of Charge |
| United Utilities Water | 54" 24" 40" Trunk Mains | Crossing Rye Bank Road in road near to North site entrance | No diversions anticipated as not in or immediately adjacent to the new site entrance. |

Potential costs for diversions / isolations total £658,000.00



- **IP Gas Main**

The principle constraint to development is the presence of an existing 610m diameter Steel Intermediate Pressure gas main owned by Cadent Gas.

This gas main operates at pressures between 2 and 7 bar.

- **Redundant services to demolished sports pavilion building**

Within the site utility records provided show the presence of existing utility services to a site within the South development plot where a building has been previously demolished. This is shown on gas records as a sports pavilion.

Whilst it is unusual for services to not be isolated back at the parent mains when buildings are demolished current records do show services to the locality of the old building still being present.

The following services are still shown as being present.

- Gas – 2" PE
- Electric – 4c 16 LV cable
- Openreach – Duct route shown. No details of presence of cables

- **Sewers**

Fuel Solutions does not specialise in Sewers / sewerage and therefore any information provided on this matter is for guidance only and should be confirmed by the client or a suitable / professional sewerage expert.

United Utilities records show the presence of

- a 1275mm dia surface water pipe from a manhole located close to the old sports pavilion location which then runs towards Ryebank Road to the South
- a 950mm x 1500mm overflow pipe that runs from a manhole in Great Stone Road to a manhole located within the North development plot.

- **Utilities at proposed site entrances**

North – Rye Bank Road

- Water

UU Water have indicated on their records and within the pre development enquiry response that there are 3 large diameter trunk mains / aqueducts (54", 24" and 40") outside of the development area where construction traffic may need to pass over.

There are no anticipated requirements for any diversion or protection works.

- Electric

Electric records indicate the presence of an LV service to a lighting column that would need to be relocated / removed when the new site entrance is constructed.



- Gas

There is a 610mm dia IP gas main entering / leaving the development site from Rye Bank Road– As detailed in the constraints details within the report above.

South – Ryebank Road / Longford Road

- Electric

There are 3 LV mains shown on ENW record plans within the existing road that may be affected by the formation of the new site access.

The location of the 3 mains appear to be within the existing road so should be at highway depth of cover and should not be affected unless construction of the new site access needs to encroach into the existing highway.

If the mains need to be lowered a budget cost of circa £10,000 should be allowed for this.

- Gas

There is a 610mm dia IP gas main entering/ leaving the development site from Ryebank Road– As detailed in the constraints details within the report above.



1.2 New Utility Infrastructure

Table 1.2 Costs for supplying new development site with gas, water, electric & Openreach networks

| Utility | Details | Comments | Cost |
|-------------------------|--|---|--|
| Electricity North West | Non Contestable LV connection located in Longford Road | Connection can supply 40 South development plots (145kVa) at LV. | £1,890.00 |
| Electricity North West | Non Contestable HV connection located in Ryebank Road South of Longford Road | Connection can supply 80 North development plots (250kVa). A Sub Station will be required in the North development plot. | £7,165.09 |
| Harlaxton Multi Utility | Electric , Gas & Water Installations to 120 plots | Installation of electric mains and services including a new sub station. Installation of gas mains and services including the gas main connection. Installation of water mains and services. Includes meter boxes and sub station housing provide and install. All on site civils are assumed to be provided by the developer so additional costs will be incurred for trenching and reinstatement. | £279,718.80 |
| United Utilities Water | Water mains connection in Rye Bank Road (North) | Quotation not provided until such time that a formal application can be raised. | £11,000.00 budget |
| United Utilities Water | Water mains connection in Rye Bank Road (North) | Quotation not provided until such time that a formal application can be raised. | £11,000.00 budget |
| United Utilities Water | 120 plot Infrastructure Charges | Infrastructure charges are charged for each new dwelling connected to the potable water and sewer networks. | £302 x 120 plots for Water = £36,240.00 £279 x 120 plots for Sewer = £33,480.00 Total £69,720.00 |
| Openreach | Openreach will provide Fibre to the properties free of charge and provide free issue ducts and chamber lids for the developer to install | There will be developer civils charges incurred to install chambers and ducts on behalf of Openreach | |

Budget cost for provision of new utility infrastructure to site (excluding on site excavation and reinstatement works) total £380,494.00



The following information would normally be required to procure formal quotations which is not available at this the time of this report:

- 1) Proposed site layout drawing (incorporating ground floor layouts in Autocad format.
- 2) Proposed drainage layout drawing.
- 3) Proposed landscape drawings.
- 4) Confirmation of any renewable technologies being considered for the site, i.e. solar, thermal, PV etc.
- 5) Confirmation of Electric vehicle (EV) charging requirements. We have assumed that EV will be required in our electric POC request.
- 6) Confirmation whether the residential units will be heated using gas or electricity. We have assumed gas heating for the purposes of this report.
- 7) Copy of an up to date accommodation schedule (i.e. no of units and bedrooms). We have made assumptions of the mix of accommodation as detailed in section 3.0 for the purposes of procuring Points of Connections (POC's) and budget costs for the provision of new infrastructure.
- 8) Construction programme.

It should be noted that utility networks are of a dynamic nature and any future developments within the area, as well as the one reviewed in this report, can substantially change the capacity availability on existing networks. Additional loads on any existing network could cause reinforcement to be required which will affect the overall cost of new infrastructure dramatically.

This report does not include any comment with regard to property or land information.

No constraints or unusual reinforcement requirements have been identified to enable the development plots to be connected to existing utility apparatus.

Points of connection for gas, electric and water have all been identified either at the site boundaries or close to the site boundaries.

There will be a requirement for a service strip to be made available between the South and North development plots.

The electric Point Of Connections for the North development plot is located in Ryebank Road to the South of the development.

United Utilities Water have also indicated that they will require the new site mains to be linked back into their existing network at both the North and South ends of the development plots. This will provide security of supply and prevent water stagnation.

Openreach have a ducted network near to the South site boundary and it is anticipated that the South and North developments would be connected into the chamber on the corner of Ryebank Road / Longford Road.



2.0 Existing utility apparatus assessment and comments

The report contains information received from utility and other companies (including information received from electricity, gas, water mains and sewers and telecommunications companies) on the whereabouts of any apparatus they maintain within or in the immediate vicinity of the site boundary relating to the land area as detailed in Section 2.1

Fuel Solutions UK Limited has reviewed the information currently provided from the utility companies and other providers.

The utility searches spreadsheet in Section 2.2 provides the details of the utility companies and other providers who have been contacted and asked to provide details on the whereabouts of any apparatus they own or maintain within or in the immediate vicinity of the site.

The companies highlighted in **red** have confirmed they have apparatus in or near the vicinity of the development (not necessarily within the development plot) and the drawings they have provided are provided in the appendices of this report.

The companies highlighted in **green** have confirmed they have no existing apparatus in the vicinity or near to the development area.

Comment is made within the report in regard to any potential diversionary elements that may need to be considered based on the information available relating to existing networks provided by the utility companies.

This report does not include any comment with regard to property or land information.

While Fuel Solutions UK Limited takes all due care in the preparation of its reports the primary information on the whereabouts of any existing utility apparatus in the vicinity of the development site has been sourced wholly from third party sources, and therefore this report can only be as complete and accurate as those sources. The information is provided in good faith but is offered without warranty.

Fuel Solutions UK Limited shall not be liable for any shortcoming by reason of the inaccuracy or omission in the source information, or of the total or partial absence of source information.

Reference should be made to the two HSE documents - HSG47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of danger from overhead electric lines" before undertaking any excavation works on the development site.

For further information please contact:

Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford
Staffordshire
ST17 4AL

David Ibbotson
e-mail: dave.ibbotson@fuelsolutions.co.uk



2.1 Area under Consideration for Utility Records Searches

Development Land
 Ryebank Road
 Chorlton

The plan shown in figure 2.1 was used to incorporate the development plots and surrounding boundaries to identify the presence of existing utility mains or apparatus that may constrain the development of the land.

Figure 2.1 Proposed area of development covered by records search requests.





2.2 Utility Searches Results Schedule

Table 2.2 List of affected and not affected responses.

See Appendix 1 for affected responses

See Appendix 2 for Not Affected responses

| Company | Comments | Affected |
|---|---|----------|
| Electricity | | |
| Electricity North West | LV within site | YES |
| Gas | | |
| Cadent | LP and IP within site | YES |
| Linesearch | All not affected except Cadent IP and ENW | NO |
| Cadent IP – see Cadent | | |
| Electricity North West | | |
| Multi Utility Companies | | |
| Energy Assets | | NO |
| Energie | | NO |
| Last Mile | | NO |
| Telecoms | | |
| Century Link | | NO |
| City Fibre | | NO |
| Colt | | NO |
| Eu Networks | | NO |
| KPN International | | NO |
| MBNL (H3G UK Ltd, EE Ltd (inc T-Mobile & Orange)) | | NO |
| Openreach BT | Within site | YES |
| Sky | | NO |
| Sota | | NO |
| Telia | | NO |
| Verizon | | NO |
| Virgin Media | | NO |
| Vodafone (Cable & Wireless, Energis, Mercury, Thus, Scottish telecoms, Your Comms, Norweb Telecoms) | | NO |
| Water | | |
| United Utilities Water | Sewer within site | YES |
| Other | | |
| Network Rail | | NO |
| Traffic master | | NO |
| | | |

Sections 2.3 to 2.6 below provide a snapshot from the affected records drawings of locations where apparatus may need to be considered for diversion, alteration or protection works prior or during construction.

2.3 Electric (ENW)

Figure 2.3.1 ENW records South – Ryebank Road / Longford Road

Records show the presence of a LV service to a location where no property now exists.

The service should be treated as live until proved otherwise by spiking of the cable.

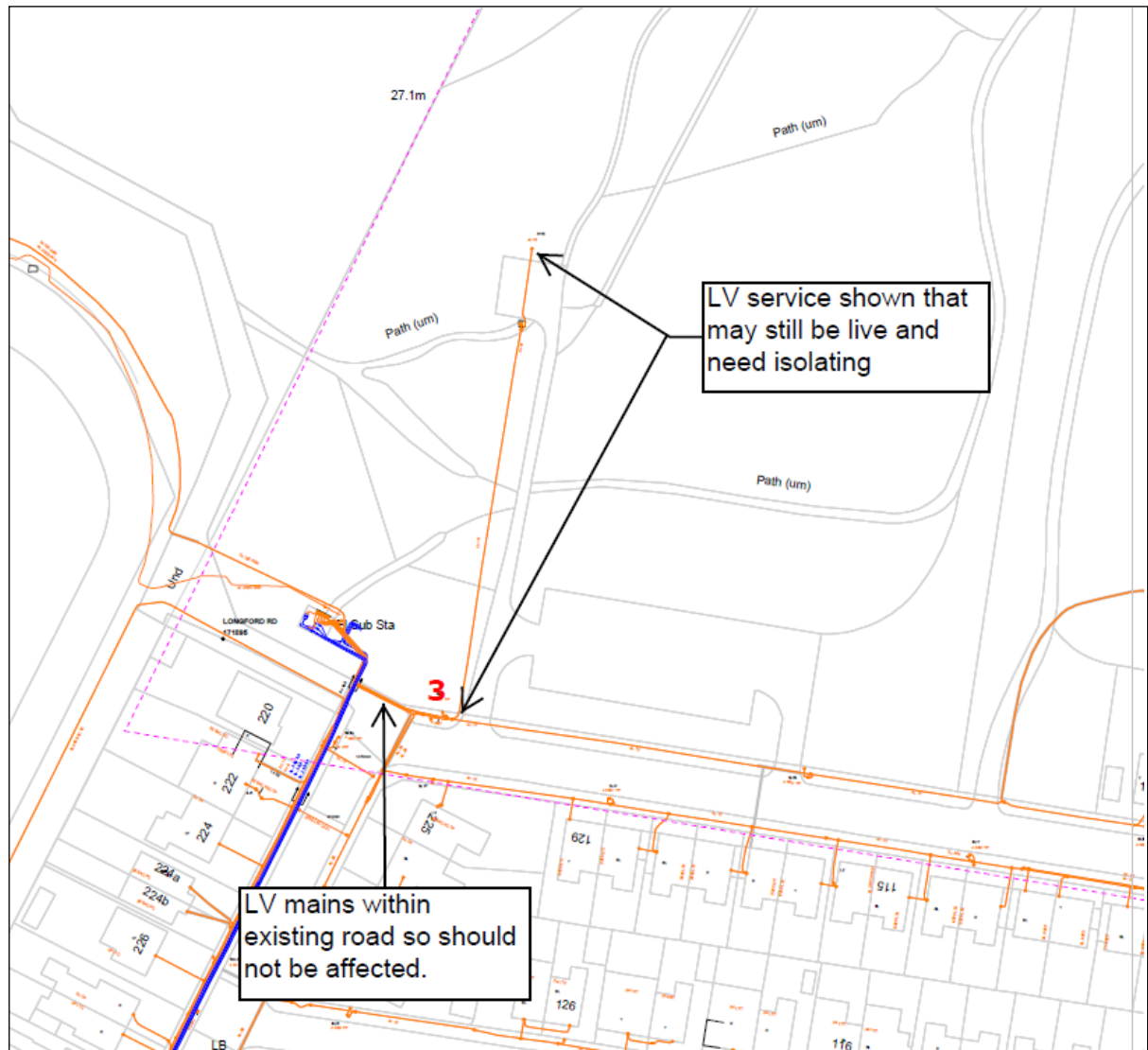
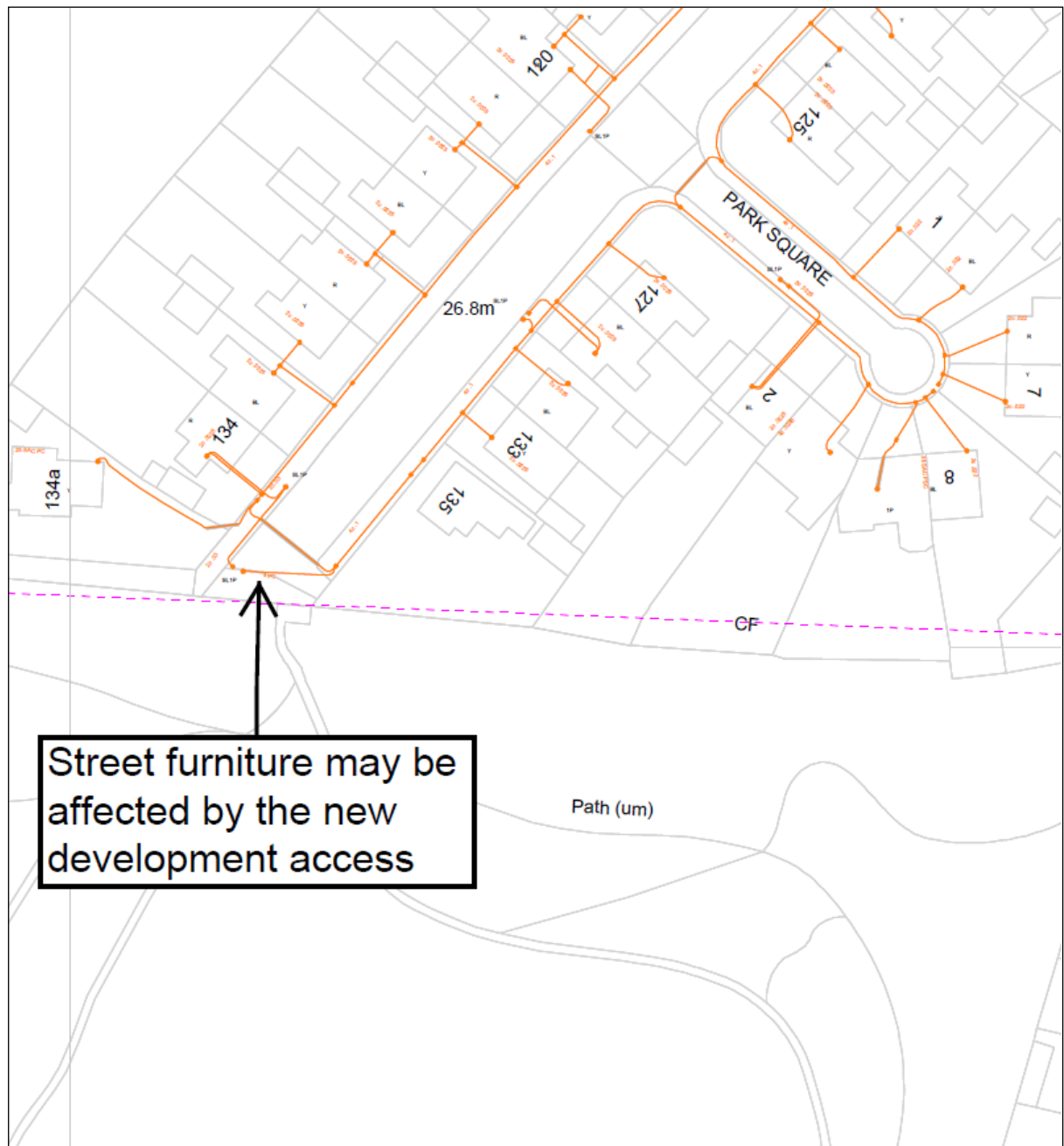


Figure 2.3.2 ENW records North – Ryebank Road

The records show the presence of LV services to possible street furniture that may need to be altered / isolated when the new site access is constructed.





2.4 Gas (Cadent)

Within the development site is an existing 610m diameter Steel Intermediate Pressure gas main and 2" PE Low Pressure gas service owned by Cadent Gas.

The IP gas main operates at pressures between 2 and 7 bar.

The LP gas service operates at pressure up to 75 mbar.

- IP main

It has been established from Cadent that the IP main has a building proximity distance (BPD) of 3 Metres either side of the 610m diameter main so in total from the centre line of the main the BPD each side is 3.305 Metres

The BPD is a separation distance recommended by the Institute of Gas Engineers and Managers pipeline design code (TD1) which is a pipeline industry recognised standard to reduce the hazard to individuals living in proximity to the pipeline.

At the time this report was written confirmation had not been provided by Cadent gas of the easement they have on the main but it is assumed that this will also be 3 Metres either side of the main.

The location of the main follows a straight path between Ryebank Road to the North and Longford Road / Ryebank Road to the South and is likely to constrain the development of new development access roads.

Formal consent will be required by Cadent before any works can be undertaken within the easement strip of the IP main or in close proximity.

If the IP main requires diverting away from the development plots it is envisaged that the main could be diverted to a location closer to the adjacent park boundary.

This would serve to de-risk the IP main from construction damage and enable new utility infrastructure to be brought into the development site without encroaching into Cadent's easement, which would need to be renegotiated for its new position.

To facilitate the diversion of the IP main will require an initial feasibility study (budget cost £12,000) and detailed design (budget cost £30,000).

Once the viability has been established a budget sum for diversion provided by Cadent is £500,000 but at this stage a contingency of +20% should be also allowed for.

The diversion is likely to take a total time period of 6 months for initial feasibility and detailed designs and 12 months for the procurement of materials and construction.



Figure 2.4.1 IP gas main alignment

The red line shows the alignment of the 610mm IP gas main through the development plot.

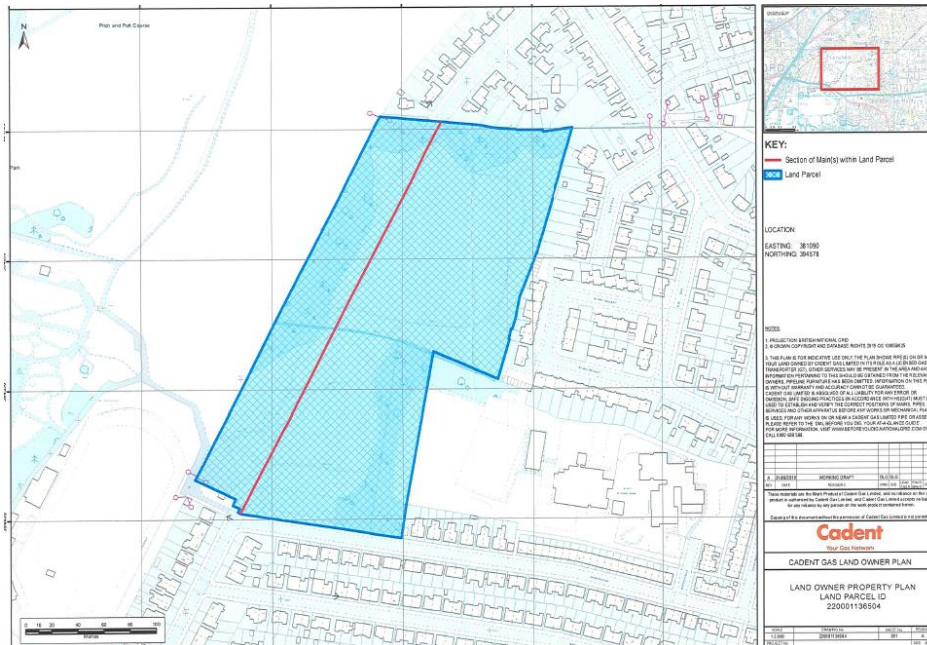


Figure 2.4.2 IP gas main (Green) and LP gas service (Red) within the development area

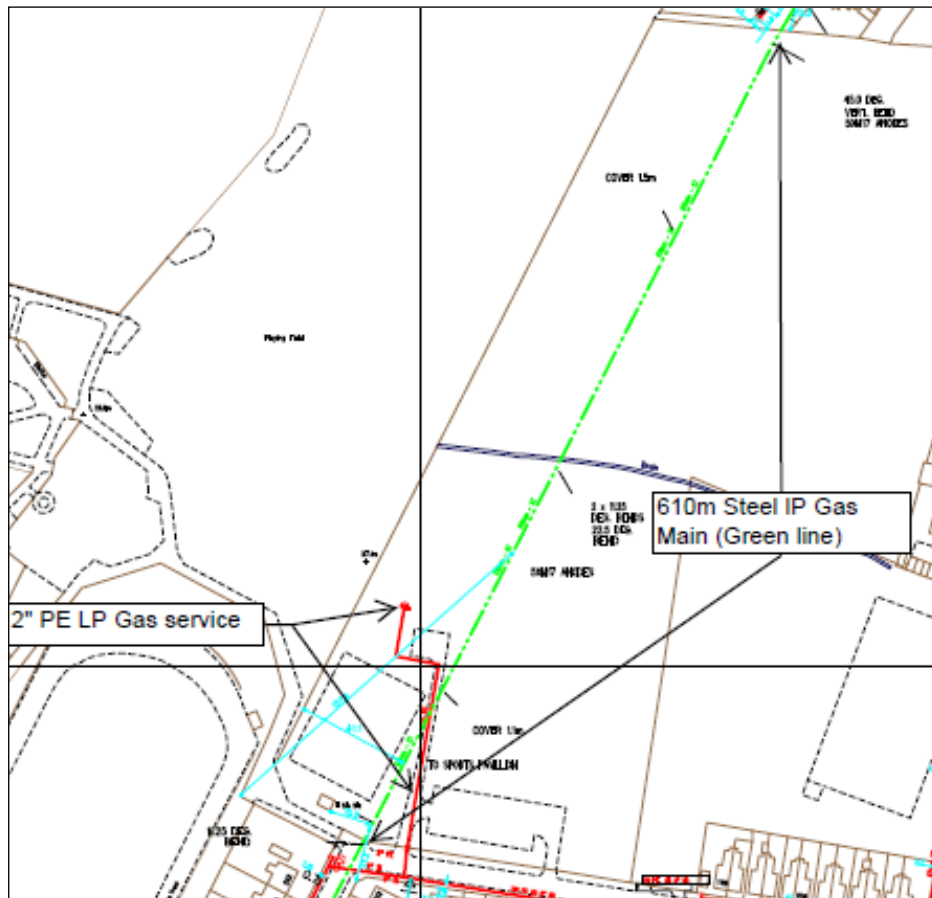
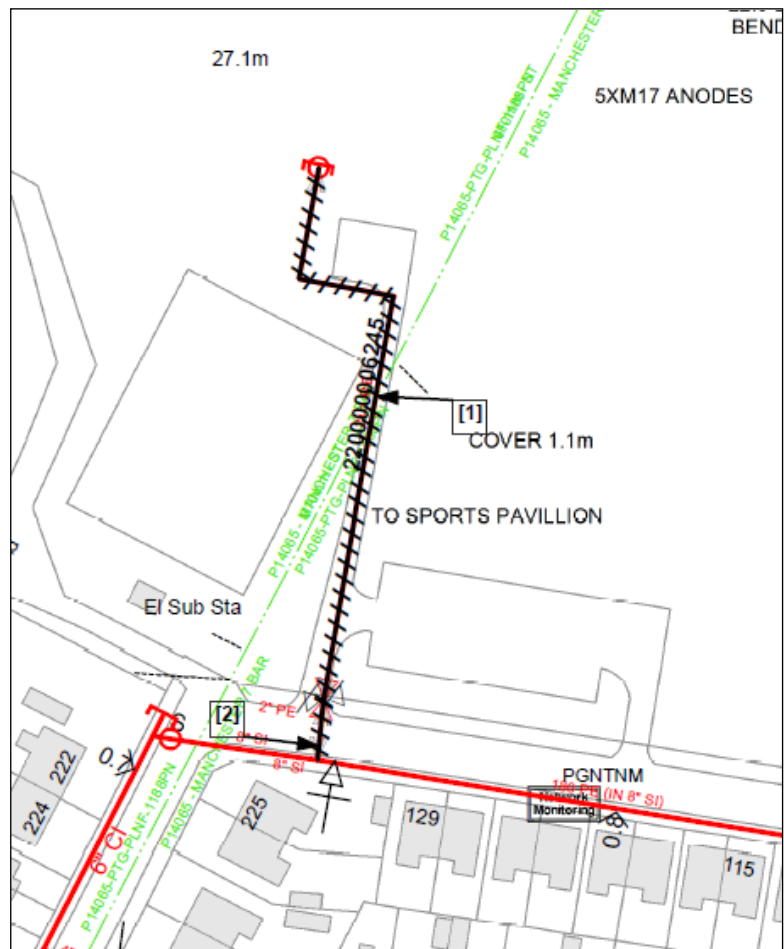


Figure 2.4.3 LP gas service (Red) proposed isolation

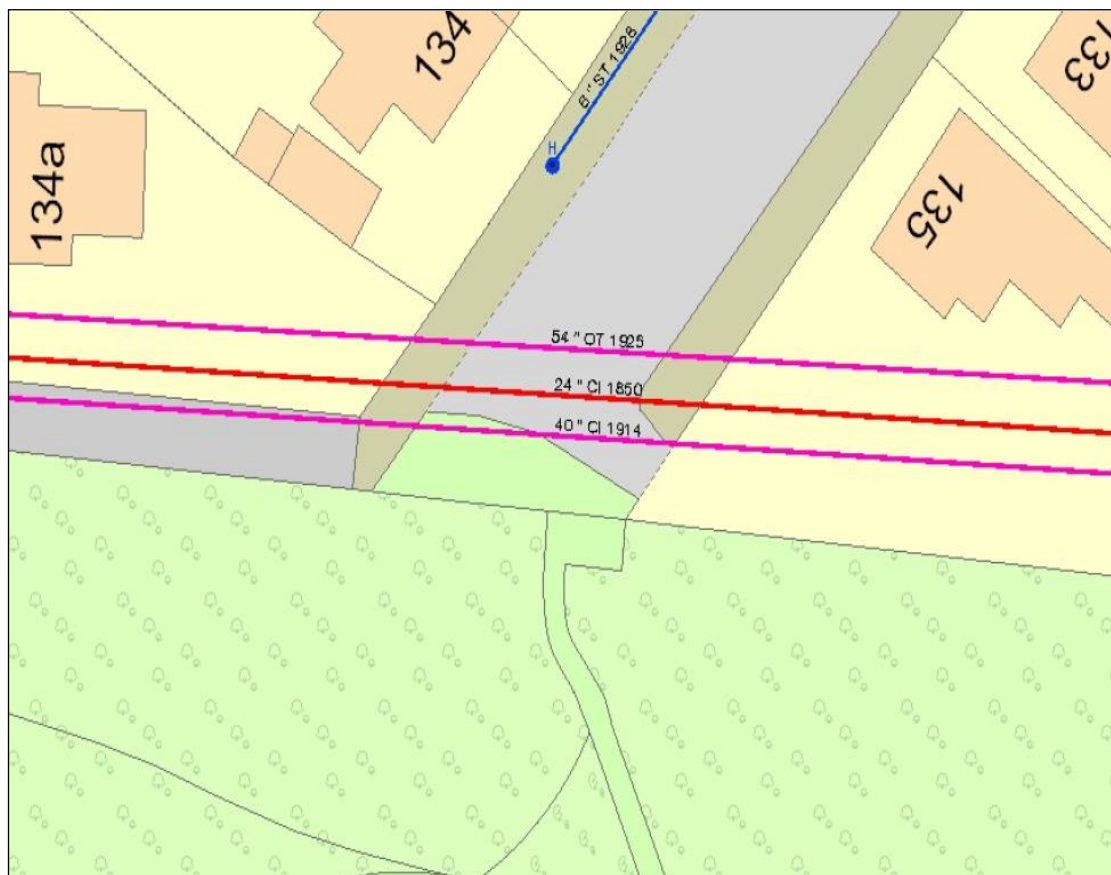


2.5 United Utilities Water

United Utilities potable water records show there are no potable water mains affected within the development plots.

As previously mentioned Fuel Solutions does not specialise in Sewers / sewerage and therefore any information provided is for guidance only and should be confirmed by the client or a suitable / professional sewerage expert.

Figure 2.5.1 United Utilities potable water mains near North development plot



This figure shows the 6" Steel potable water main terminating with a hydrant outside No. 134 Rye Bank Road onto which the new North development plot will make a connection.

The snapshot shows the 54", 24" and 40" trunk mains outside of the development area but over which construction traffic will need to pass.

Any protection that may be required will need to be agreed with UU Water.

Figure 2.5.2 United Utilities potable water mains near South development plot



This figure shows the 125m diameter main in Longford Road to which the South development plot is to be connected.

Figure 2.5.3 United Utilities surface water 1275m dia pipe from manhole near old sports pavilion

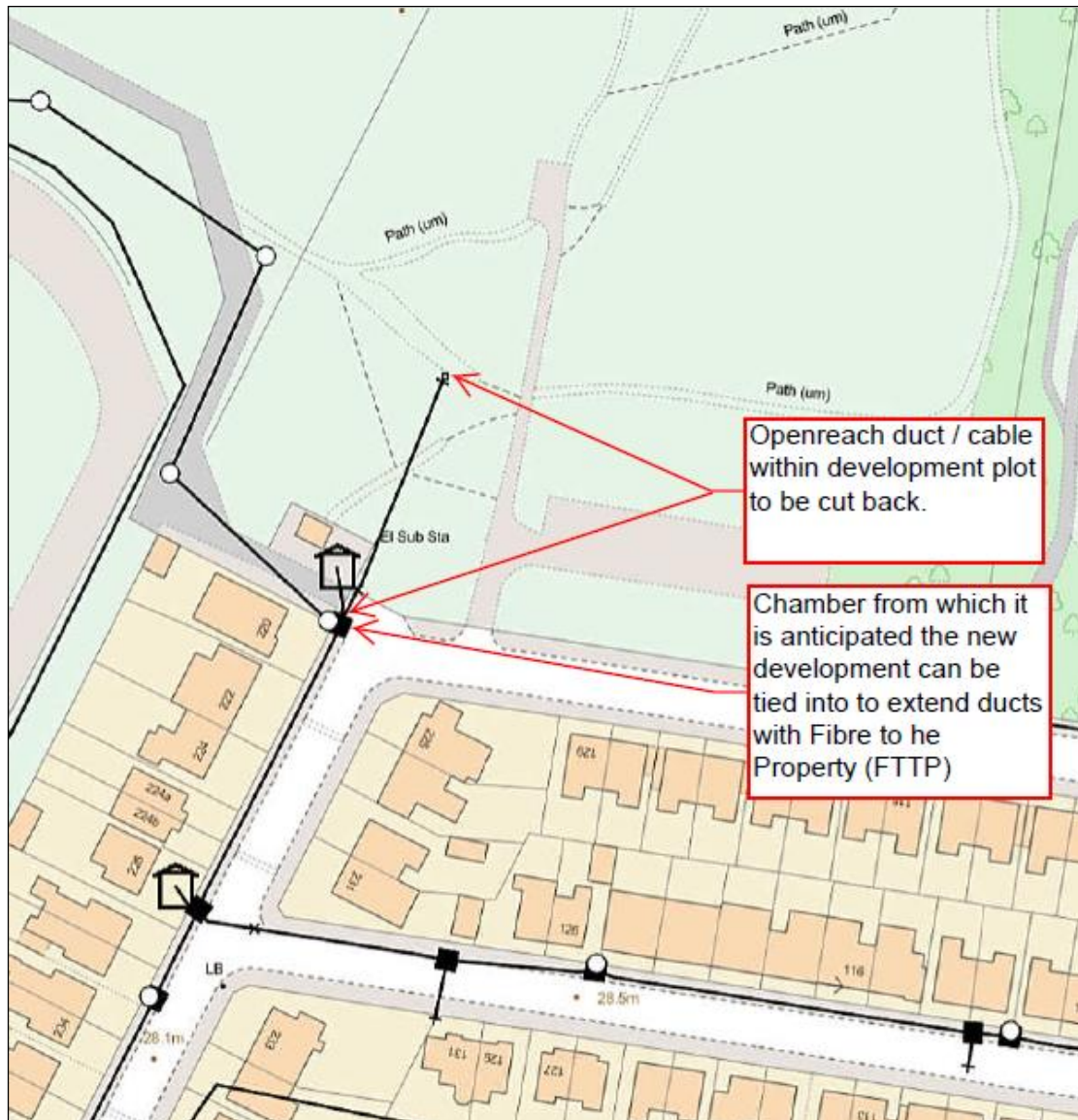


Figure 2.5.4 United Utilities discharge overflow 950 x 1500 pipe to manhole within the North development plot.



2.6 OPENREACH

Figure 2.6.1 Openreach record showing a duct / cable within the South development plot which will require cutting back.



The figure also shows the location of a chamber from which it is anticipated the new duct network to supply the development plots will be tied into and from which fibre to the property will be supplied.



3.0 Description of the new development proposals

The Ryebank Road site as shown in figure 3.0.1 has been vacant for a number of years being surplus to MMU's requirements.

The site has been underutilised and this report examines use of the land for domestic dwelling development.

For the purposes of this report it has been assumed that there will be two distinct development plots (see figure 3.0.2) with the anticipated development mixes shown below.

At this stage there are no dwelling development masterplans available so a high level assessment has been undertaken with regards to the feasibility and possible costs for developing out the two plot areas.

It has been assumed that although the two plots will be developed individually that a utility corridor can be utilised between the two development areas as necessary for the routing of utility mains networks. See figure 3.0.3

North Development

80 Dwellings comprising

- 20 x 2 Bed
- 20 x 3 Bed
- 40 x 4 Bed

Access to service the proposed North end of the development is from

Ryebank Road
Old Trafford
Manchester
M16 0HR

Approximate Co-Ordinates E 381082 N 394755

South Development

40 Dwellings comprising

- 30 x 4 Bed
- 10 x 5 Bed

Access to service the proposed South end of the development is from

Ryebank Road / Longford Road
Chorlton-Cum-Hardy
Manchester
M21 9LJ

Approximate Co-Ordinates E 380918 N 394453

Figure 3.0.1 Development Area

The development area is shown contained within the red line boundary and comprises a total site area of 46,263 m²

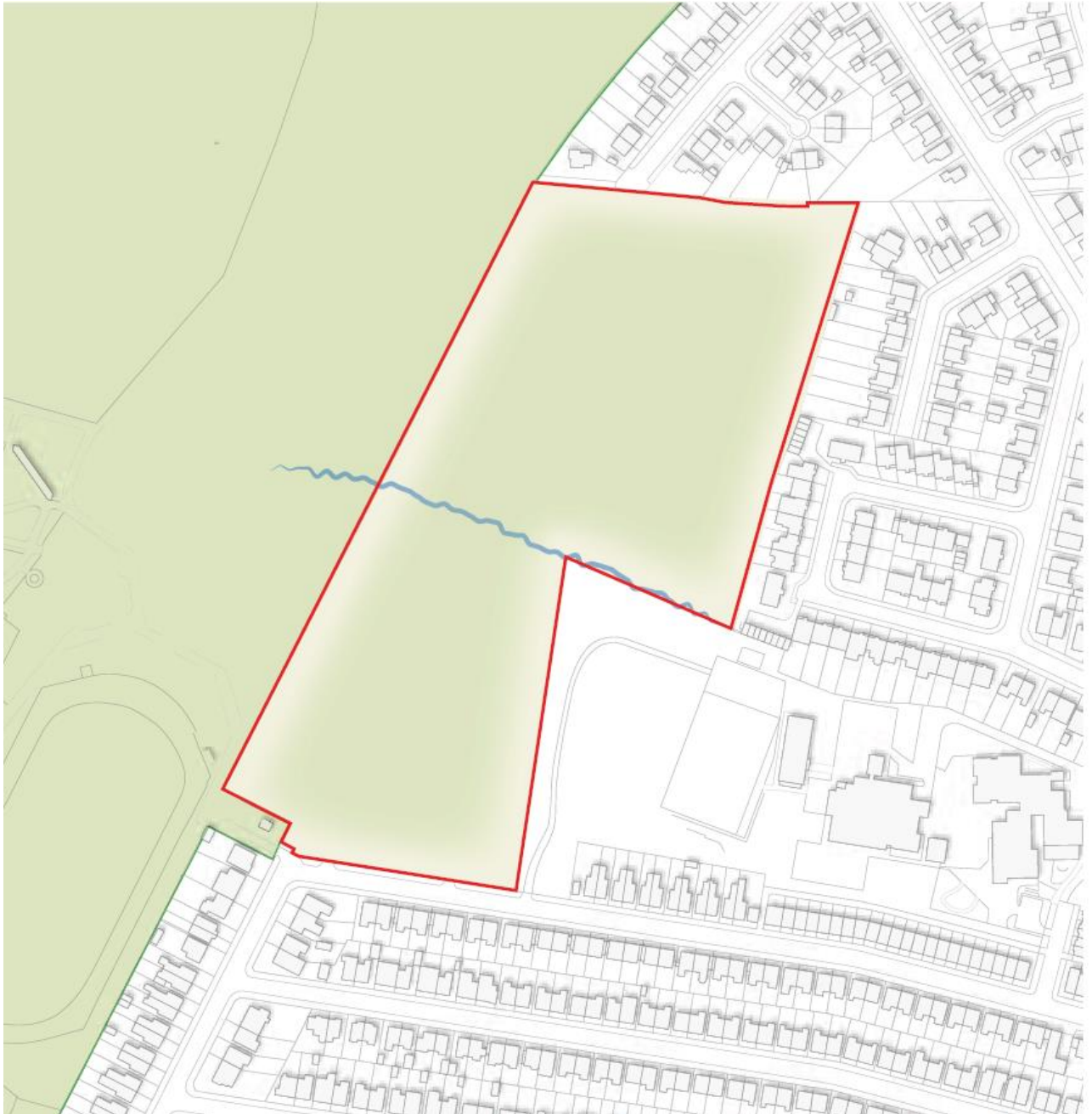


Figure 3.0.2 Development plots

Two separate development plots are assumed in keeping with the adjacent park's natural character. This allows for a maximum of 71% developed area.

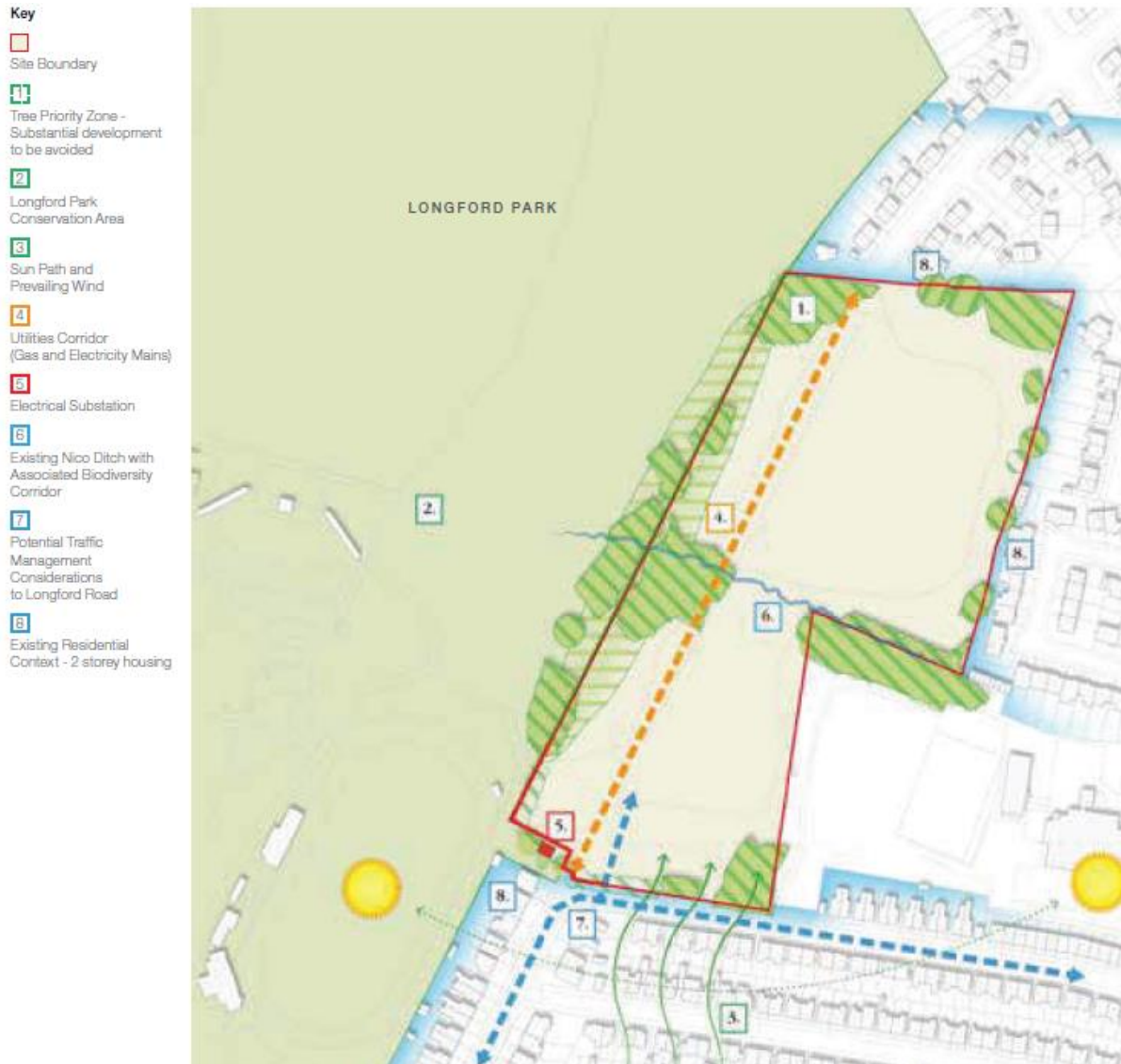


The southern development plot accessed from Ryebank Road / Longford Road is to achieve a low density of around 20 units per hectare to accommodate family homes (4-5 bed).

The northern development is to achieve a medium density of around 26 units per hectare to accommodate a greater mix of 2,3 and 4 bed homes.

It is anticipated the site will be able to accommodate up to 120 new homes.

Figure 3.0.3 Utility Corridor



There is an existing gas IP main following line 4 and it is assumed that the corridor formed by this gas main will be utilised as necessary by other utilities to route new infrastructure mains as may be necessary to facilitate development. It is anticipated that the IP gas main may be diverted towards the Longford Park boundary freeing the alignment for other new utility apparatus to be installed outside of the IP gas main easement.



3.1 Utility Loadings

- **Electric**

The potential for electric car charging (EV) facilities to be made available have been considered in the electric loadings used to apply for points of connections.

Assumed After Diversity Maximum Demands (ADMD) have been used as follows:

North development plot – 80 dwellings

20 x 2 bed @ 1.0 kW

20 x 3 bed @ 1.5 kW

40 x 4 bed @ 2.0 kW

Assumed slow car charging for each property + 1.5 kW x 80

Total 250 kWh

South development plot – 40 dwellings

30 x 4 bed @ 2.0 kW

10 x 5 bed @ 2.5 kW

Assumed slow car charging for each property = 1.5 kW x 40

Total 145 kVa

- **Gas**

It has been assumed that gas after diversity has been applied will be at around 1 m³/hr for each property upto 4 bed and 1.5 m³/hr for 5 bed dwellings and that there will be gas heating to each property.

The breakdown of the load is as follows :

The SHQ (Peak hour) values are

100 Dwellings (2,3 & 4 bed mix) @ 1scmh = 1083 kWh SHQ

20 Dwellings (5 bed) @ 1.5 scmh = 325 kWh SHQ

Total SHQ = 1408 kWh

The AQ (Annual consumption) values are

100 x 12,000 kWh = 1,200,000 kWh

20 x 17,000 kWh = 340,000 kWh

Total AQ = 1,540,000 kWh

- **Water**

It is assumed that each dwelling will have a standard 25m domestic connection

- **Openreach**

It is assumed each property will have Fibre To The Property (FTTP) as Openreach offer this free of charge for development of 30- plots or more.



3.2 Points of Connection

See Appendix 5 for all POC offers referred to below.

- **Electric**

Figure 3.2.1 Electric POC for South Development site only – LV connection for 40 plots

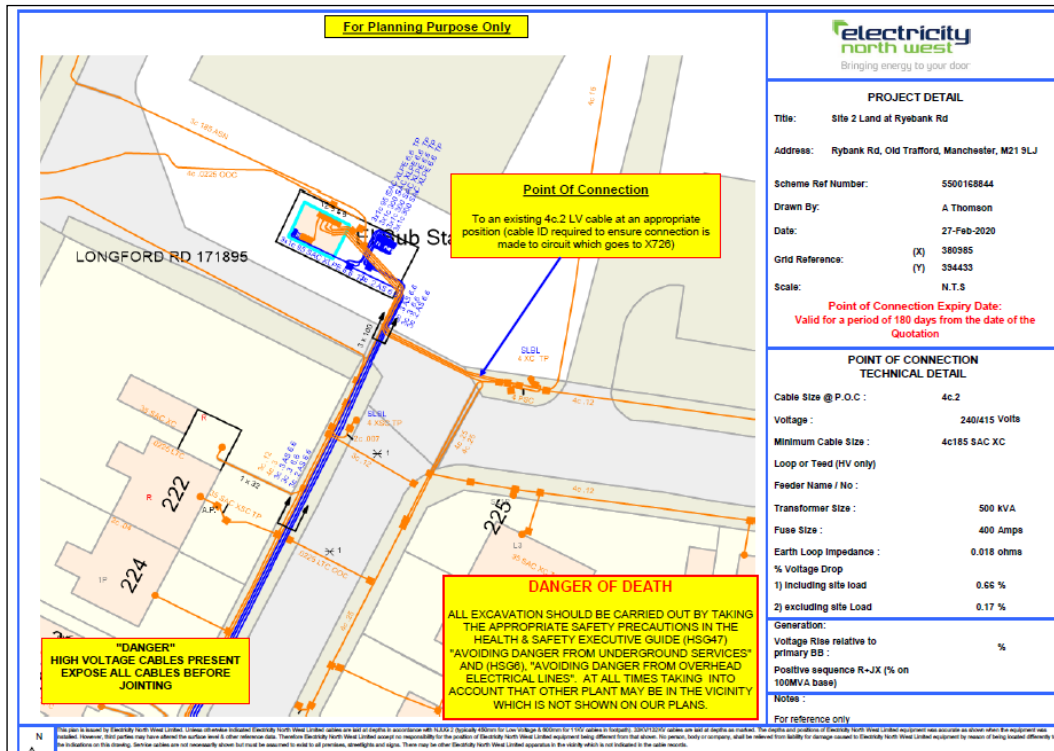
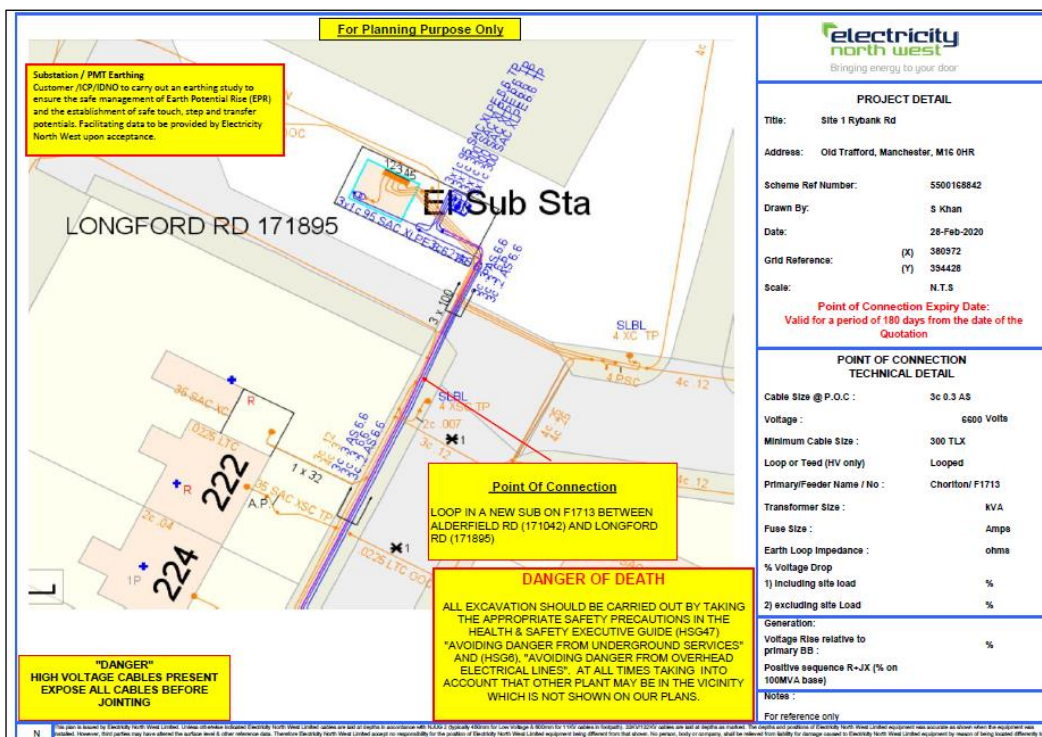


Figure 3.2.2 Electric POC for North Development site only – HV connection for 80 plots





ENW have provided two POC offers.

The POC offers assume an iDNO connection (see section 3.3) and provide the non-contestable connection charges that are applicable for each offer.

- The site 1 offer is to provide a HV POC connection in Ryebank Road to enable the development of the North development plot of 80 dwellings with an electric load of 250 kVa.

The non contestable charges associated with ENW making the LV connection is £7,165.09 plus VAT

- The site 2 offer is to provide a LV POC connection in Longford Road to enable the development of the South development plot of 40 dwellings with an electric load of 145 kVa.

The non contestable charges associated with ENW making the LV connection is 1890.00 plus VAT



- **Gas**

Figure 3.2.3 Gas POC option 1 for North & South Development site

Connection is to a 8" diameter Spun Iron low pressure main in Longford Road.

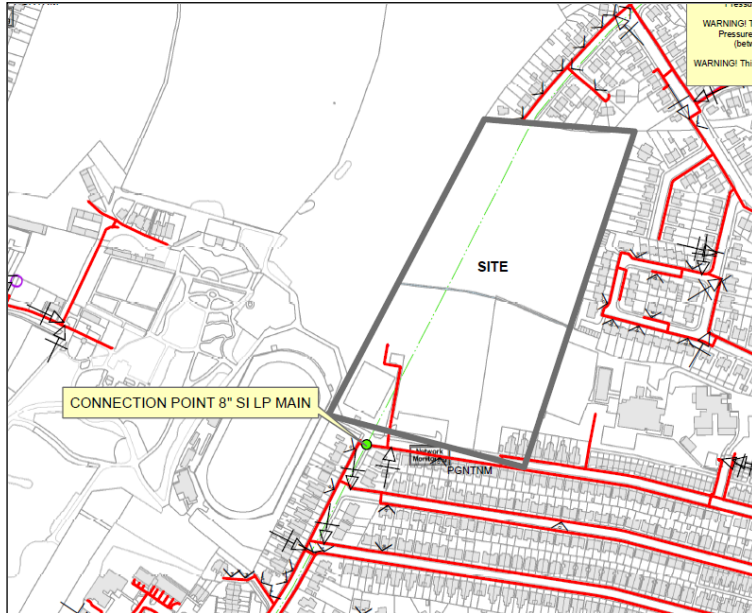
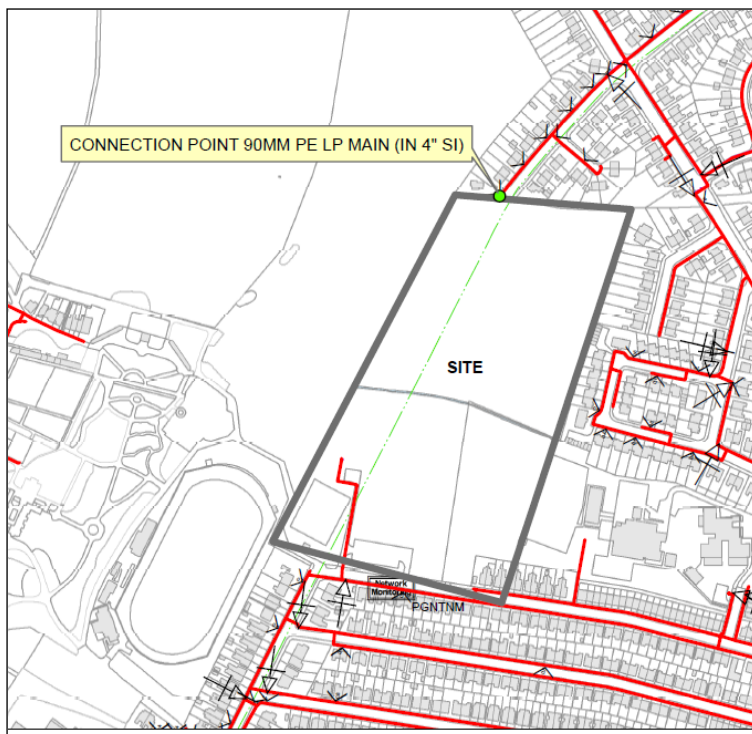


Figure 3.2.4 Gas POC option 2 for North & South Development site

Connection is to a 90mm diameter PE low pressure main in Rye Bank Road.



Cadent have confirmed that the POC offers provided are able to support both development plots from either location

- **Water**

Figure 3.2.5 Water POC's for North & South Development site



United Utilities Water have advised that the POC for the North development plot is from a connection to the 6" main in Rye Bank Road and the South development plot is from the 125m PE main in Longford Road. The mains through the development plots are to be linked with a shut valve in between the two sections.



3.3 New utility networks

The most cost effective procurement option for new utility infrastructure for housing developments is for the electricity and gas networks to be adopted by independent network operators other than the incumbent utility companies for the area.

In this area the incumbent electric Distribution Network Operator (DNO) is Electricity North West and the incumbent Gas Distribution Network (GDN) is Cadent.

Independent network operators take into account future revenue streams they will receive and use this revenue to discount and subsidise the construction costs of new networks.

In the water market there are options for potable water and sewer networks to be owned by other networks other than the incumbent network which is United Utilities Water in this area. However the number of dwellings has to be well into the 100's to make this a viable option.

The alternative option with water is for a self lay company to install the water mains within the development to United Utilities Water's design and UU Water will adopt the mains on commissioning. The self lay company is then still able to install services as they need to be installed.

Openreach are assumed to be the telecom provider and their policy now is for their ducts to be used as an open network that will allow other providers to use their ducts.

3.3.1 IDNO's

Independent Distribution Network Operators (IDNOs) develop, operate and maintain local electricity distribution networks.

IDNO networks are directly connected to the Distribution Network Operator (DNO) networks or indirectly to the DNO via another IDNO.

What is the difference between an IDNO and a DNO?

Each of the 14 DNOs covers a separate geographical region of Great Britain. IDNOs own and operate smaller networks located within the areas covered by the DNOs. IDNO networks are mainly extensions to the DNO networks serving new housing and commercial developments.

IDNOs are regulated in the same way as DNOs, except the IDNO licence does not have all the conditions of the DNO licence.

Ofgem regulate the amounts that IDNOs can charge their customers for using their networks via a 'Relative Price Control'. This requires IDNO charges to be capped for all customers at a level broadly consistent with the DNO equivalent charge.

Therefore, end users will see no differential in costs that they pay for their electricity to their chosen provider irrespective of whether a DNO or IDNO own and operate the network.



The benefits that a developer can expect from using an IDNO can be summarised as follows :

- Reduced costs with total transparency
- More suitable programme
- More traditional Contract conditions with surety provided
- IDNO will make a capital contribution to the capital costs
- IDNO can offer flexible financial business models
- IDNO can calculate more accurate loads resulting in optimum scheme and costs

The non contestable connection works will still need to be carried out by ENW.

3.3.2 IGT's

Independent Gas Transporters (IGTs) develop, operate and maintain local gas transportation networks.

IGT networks are directly connected to the Gas Distribution Network (GDN) via a Connected System Entry Point or indirectly to the GDN via another IGT. Although domestic, industrial and commercial premises are connected to IGT networks, new housing and commercial developments form the largest share of the IGT market. It is estimated that the number of consumers connected to IGT networks is around one million.

Ofgem regulate the amounts that IGTs can charge their customers for using their networks via a 'Relative Price Control' (RPC). This requires IGT charges to be capped for all new customers at a level broadly consistent with the GDN equivalent charge.

Therefore, end users will see no differential in costs that they pay for their gas to their chosen provider irrespective of whether a GDN or IGT own and operate the network.

3.3.3 Self Lay Water

If a development requires a new water main or sewer, you may ask the water or sewerage company to install the pipework. Alternatively, developers may choose their own contractor to do the work, which is known as **self-lay**. The water company will take over responsibility for (adopt) self-laid pipes that meet the terms of its agreement with the developer or self-lay organisation (SLO) that carries out the work.

Developers prefer to use self-lay because it is possible to provide a multi-utility option. This can save both time and money and provide better co-ordination of infrastructure provision.

The current water policies allow for UU Water to make a contribution (asset payment) to the self lay company.

3.3.4 Multi Utility Companies

As mentioned previously there are no development masterplans of dwelling layouts and locations and therefore it has been difficult to engage utility companies to provide costs for such a speculative development without them knowing distance of mains involved and locations for sub stations etc.



Enquiries have been raised with

- Fulcrum
- Energy Assets
- The ICPO

All have not responded or declined to provide quotations due to the lack of definitive site information.

3.3.4.1 Harlaxton

An enquiry has also been raised with Harlaxton who are an IDNO and IGT network owner and who will adopt the gas and electric networks on connection to the ENW electric network and Cadent gas network.

They will also install the water mains and services providing a self lay design and agreement has been entered into. At this stage it is too early to be able to enter into a Self Lay agreement with UU Water as full planning will be required before they will engage to this level.

Harlaxton have provided a quotation to install electric, gas and water mains and services to 120 plots from the POC locations provided.

The total budget cost provided by Harlaxton is £279,718.80 plus VAT

For a full breakdown of inclusions and exclusions please see appendix 6.

In summary Harlaxton have included / excluded key items as follows :

- Included are the offsite electric works to connect to the electric POC's including all excavation and reinstatement.
- Included is the installation of the HV main to a new sub station in the North development plot and they have included for the supply and installation of the sub station housing and transformer. An allowance has been made for 500M of HV cable to a sub station position from Ryebank Road to a sub station position. This allows for a linear distance of 250M from the POC as the cable has to be looped back into the ENW network.
- All onsite excavations and reinstatement for all utilities are to be provided by the developer so additional costs will be incurred for this provision.
- Install gas mains and services and make POC connections
- Install water mains and services.
- Excluded are the water mains connections and water infrastructure charges.

See Appendix 6 for Harlaxton's budget quotation with full details of inclusions and exclusions.

An assumption is made from past projects that the two water mains connections will cost circa £11,000 each and these costs will need to be added to Harlaxton's quotation.

Water infrastructure charges for water and sewers will need to also be paid to UU Water and currently the rates of these are :

Water £302 per plot & Sewer £279 / plot

The total infrastructure charges that would be applicable are £69,720

Details of Infrastructure Charges can be found in United Utilities Water Charges Scheme 2020/ 2021 Section 6 – See Appendix 7



There is currently an offset allowance of £751 per dwelling that will be made as an allowance towards the capital cost of water mains.

Please refer to a worked example section 17.9 in the United Utilities Water Charges Scheme 2020/ 2021Section that contains an example of estimated connection charges and how the infrastructure charges and offset allowances are applied.

3.3.4 Openreach

Openreach policy is that they will provide the necessary offsite works free of charge to provide fibre to the property (FTTP) for developments consisting of 30 plots or more.

Openreach will also provide free issue ducts and chamber lids to the developer who will install the ducts within the development to the properties.

A Openreach design can only be provided when there is a definitive site layout and confirmed numbers of dwellings.

Please see Appendix 8 for details of Openreach's fibre policy and also their developer guidelines.



4.0 Appendices

Appendix 1- Affected Utilities Records

Appendix 2 – Not Affected Response

Appendix 3 – Cadent IP gas main response

Appendix 4 – Cadent 2” PE service isolation

Appendix 5 – POC’s
Gas, electric , water

Appendix 6 – Harlaxton Budget Quote

Appendix 7 – UU Water Charges Scheme

Appendix 8 – Openreach policy

APPENDIX 1

Affected Utility Records

- Cadent Gas
- Electricity North West
- Openreach
- United Utilities Water

Dave Ibbotson
Manchester Metropolitan University CO Fuel
Solutio
PARKFIELD BURSINESS CENTRE
PARK STREET
STAFFORD
ST17 4AL

Plant Protection
Cadent
Block 1; Floor 1
Brick Kiln Street
Hinckley
LE10 0NA
E-mail: plantprotection@cadentgas.com
Telephone: +44 (0)800 688588

National Gas Emergency Number:
0800 111 999*

National Grid Electricity Emergency Number:
0800 40 40 90*

* Available 24 hours, 7 days/week.
Calls may be recorded and monitored.

www.cadentgas.com

Date: 04/02/2020

Our Ref: NW_GW1B_3FWP_052184

Your Ref: Ryebank Fields (JL)

RE: Formal Enquiry, Longford Road, Chorlton-cum-Hardy, Manchester, M21 9SR

Thank you for your enquiry which was received on 03/02/2020.
Please note this response and any attached map(s) are valid for 28 days.

An assessment has been carried out with respect to Cadent Gas Limited, National Grid Electricity Transmission plc's and National Grid Gas Transmission plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.

For details of Network areas please see the Cadent website (<http://cadentgas.com/Digging-safely/Dial-before-you-dig>) or the enclosed documentation.

Are My Works Affected?

Searches based on your enquiry have identified that there is apparatus in the vicinity of your enquiry which may be affected by the activities specified.

Diversion or protection of Cadent and/or National Grid's apparatus may therefore be necessary.

Due to the presence of Cadent and/or National Grid apparatus in proximity to the specified area, the contractor should contact Plant Protection before any works are carried out to ensure the apparatus is not affected by any of the proposed works.

Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Limited, National Grid Electricity Transmission plc (NGET) and National Grid Gas Transmission plc (NGGT) and apparatus. This assessment does **NOT** include:

- | Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Plant Protection.
- | Gas service pipes and related apparatus
- | Recently installed apparatus
- | Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on either the [National Grid](#) or [Cadent](#) website.

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Limited, NGGT and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Plant Protection team via e-mail ([click here](#)) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

ASSESSMENT

Affected Apparatus

The apparatus that has been identified as being in the vicinity of your proposed works is:

- | High or Intermediate pressure (above 2 bar) Gas Pipelines and associated equipment
- | Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are gas services and associated apparatus in the vicinity)

As your proposal is in proximity to apparatus, we have referred your enquiry / consultation to the following department(s) for further assessment:

- | Cadent Pipelines Team
- | Cadent Diversions Team

We request that you take no further action with regards to your proposal until you hear from the above. We will contact you within 28 working days from the date of this response. Please contact us if you have not had a response within this timeframe.

Requirements

BEFORE carrying out any work you must:

- | **Ensure that no works are undertaken in the vicinity of our gas pipelines and that no heavy plant, machinery or vehicles cross the route of the pipeline until detailed consultation has taken place.**
- | Carefully read these requirements including the attached guidance documents and maps showing the location of apparatus.
- | Contact the landowner and ensure any proposed works in private land do not infringe Cadent and/or National Grid's legal rights (i.e. easements or wayleaves). If the works are in the road or footpath the relevant local authority should be contacted.
- | Ensure that all persons, including direct labour and contractors, working for you on or near Cadent and/or National Grid's apparatus follow the requirements of the HSE Guidance Notes HSG47 - 'Avoiding Danger from Underground Services' and GS6 – 'Avoidance of danger from overhead electric power lines'. This guidance can be downloaded free of charge at <http://www.hse.gov.uk>
- | In line with the above guidance, verify and establish the actual position of mains, pipes, cables, services and other apparatus on site before any activities are undertaken.

GUIDANCE

High Pressure Gas Pipelines Guidance:

If working in the vicinity of a high pressure gas pipeline the following document must be followed: 'Specification for Safe Working in the Vicinity of Cadent and/or National Grid High Pressure Gas Pipelines and Associated Installations - Requirements for Third Parties' (SSW22). This can be obtained from: <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=33968>

Dial Before You Dig Pipelines Guidance:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=33969>

Excavating Safely - Avoiding injury when working near gas pipes:

http://www.nationalgrid.com/NR/rdonlyres/2D2EEA97-B213-459C-9A26-18361C6E0B0D/25249/Digsafe_leaflet3e2finalamends061207.pdf

Standard Guidance

Essential Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982>

General Guidance document:

<http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103>

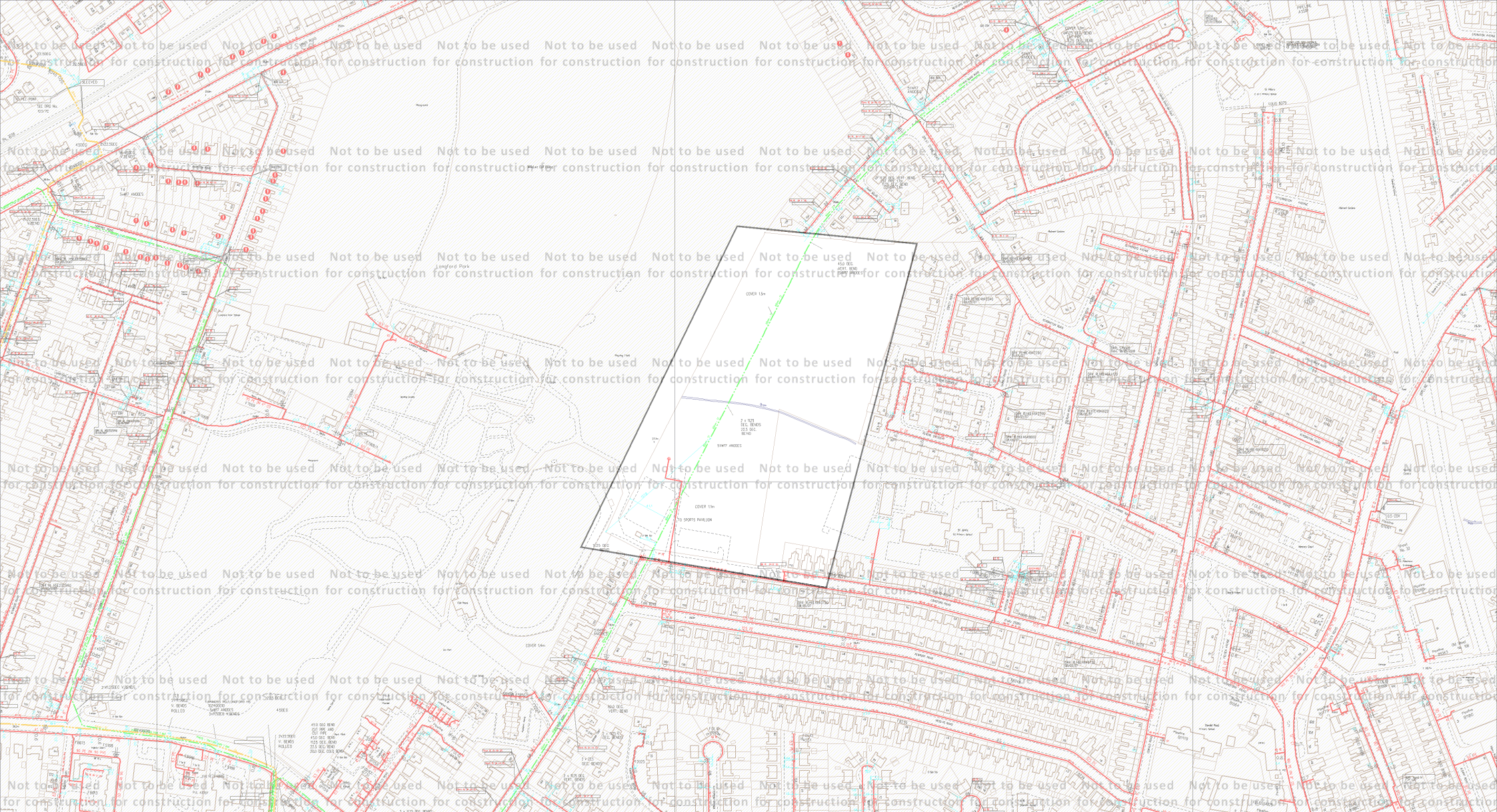
Excavating Safely in the vicinity of gas pipes guidance (Credit card):

<http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf>

Excavating Safely in the vicinity of electricity cables guidance (Credit card):






<http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf>


Copies of all the Guidance Documents can also be downloaded from the [National Grid](#) and [Cadent](#) websites.



ID: NW_GW1B_3FWP_052184
 USER: Lauren.Smith
 DATE: 04/02/2020
 DATA DATE: 03/02/2020
 REF: Ryebank Fields (JL)
 MAP REF: SJ8194
 CENTRE: 381071, 394572

View extent: 1445m, 785m

LP MAINS 
 MP MAINS 
 IP MAINS 
 LHP MAINS 
 NHP MAINS 


0m  100m
 Approximate scale 1:5000
 on A4 Colour Landscape

Diversion may be necessary. Further consultation required

This plan shows those pipes owned by Cadent Gas Limited in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

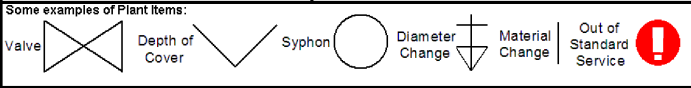
Map 1 of 1 (GAS)

MAPS Plot Server Version 1.11.0


 Your Gas Network

Requested by: Manchester Metropolitan University CO Fu

This plan is reproduced from or based on the OS map by Cadent Gas Limited, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved. Ordnance Survey Licence number 100024886



ENQUIRY SUMMARY

Received Date

03/02/2020

Your Reference

Ryebank Fields (JL)

Location

Centre Point: 381071, 394572

X Extent: 326

Y Extent: 350

Postcode: M21 9SR

Location Description: Longford Road, Chorlton-cum-Hardy, Manchester, M21 9SR

Map Options

Paper Size: A4

Orientation: LANDSCAPE

Requested Scale: 2500

Actual Scale: 1:5000 (GAS)

Real World Extents: 1445m x 785m (GAS)

Recipients

pprsteam@cadentgas.com

Enquirer Details

Organisation Name: Manchester Metropolitan University CO Fuel Solutio

Contact Name: Dave Ibbotson

Email Address: dave.ibbotson@fuelsolutions.co.uk

Telephone: 07944029982

Address: PARKFIELD BURSINESS CENTRE, PARK STREET, STAFFORD, ST17 4AL

Description of Works

C3 request (E)

Enquiry Type

Formal Enquiry

Activity Type

Development Project

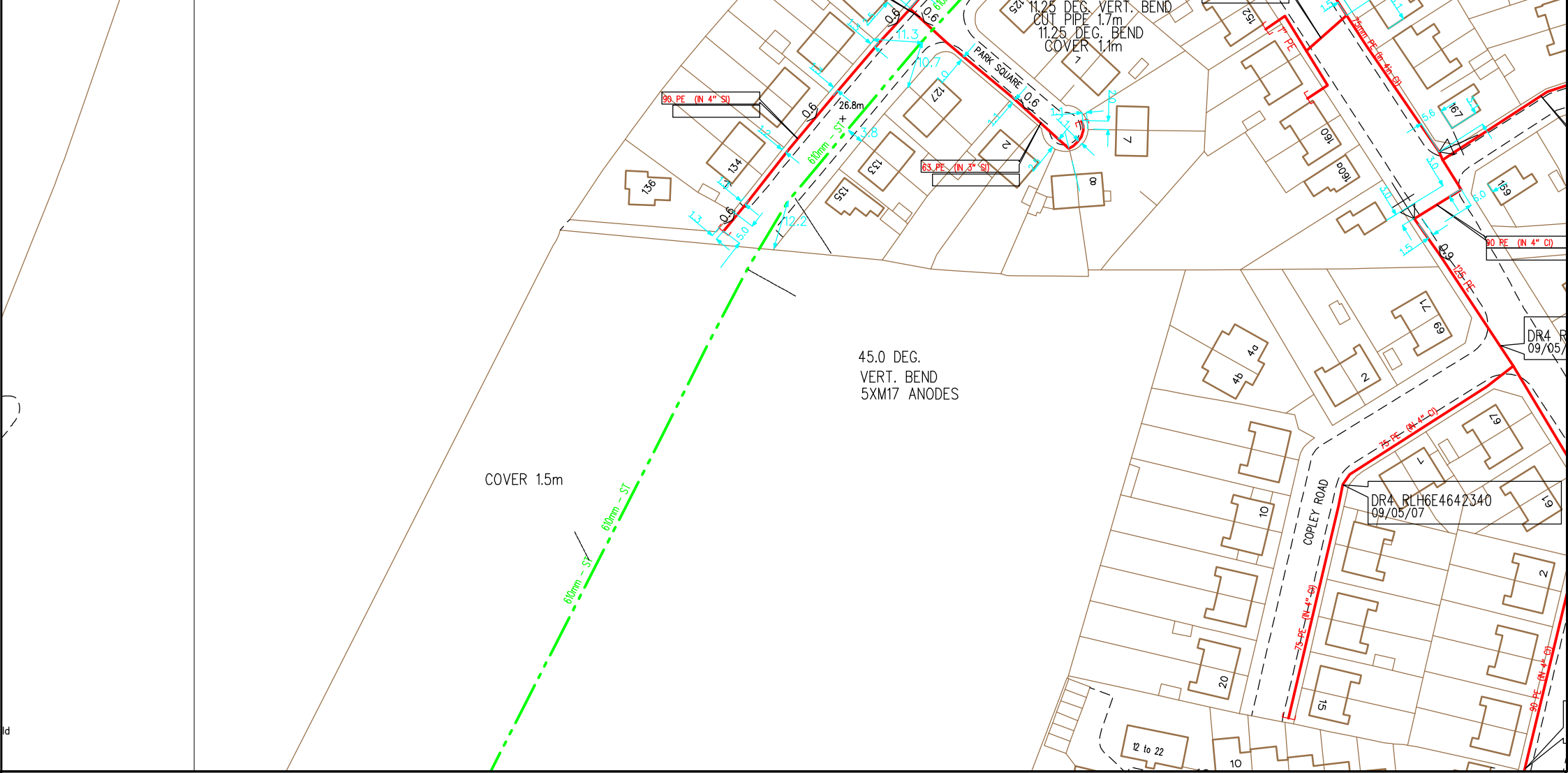
Work Types

Work Type: Deep Excavation (greater than or equal to 0.3m)

Notice Types

Notice Type: NRSWA Diversion Request (C3 Draft Scheme and Budget)

WARNING! This area contains Gas Mains Operating at Intermediate Pressure between 2 and 7 bar. Before excavating in the area call 0800 688588.

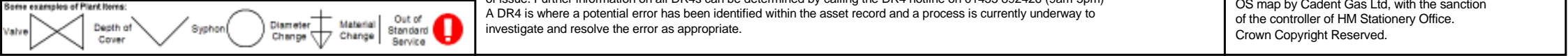


| |
|--------------------------|
| SCALE: 1 : 1250 |
| USER ID: Dave |
| DATE: 24/02/2020 |
| EXTRACT DATE: 02/09/2019 |
| MAP REF: SJ8194 |
| CENTRE: 381140, 394714 |

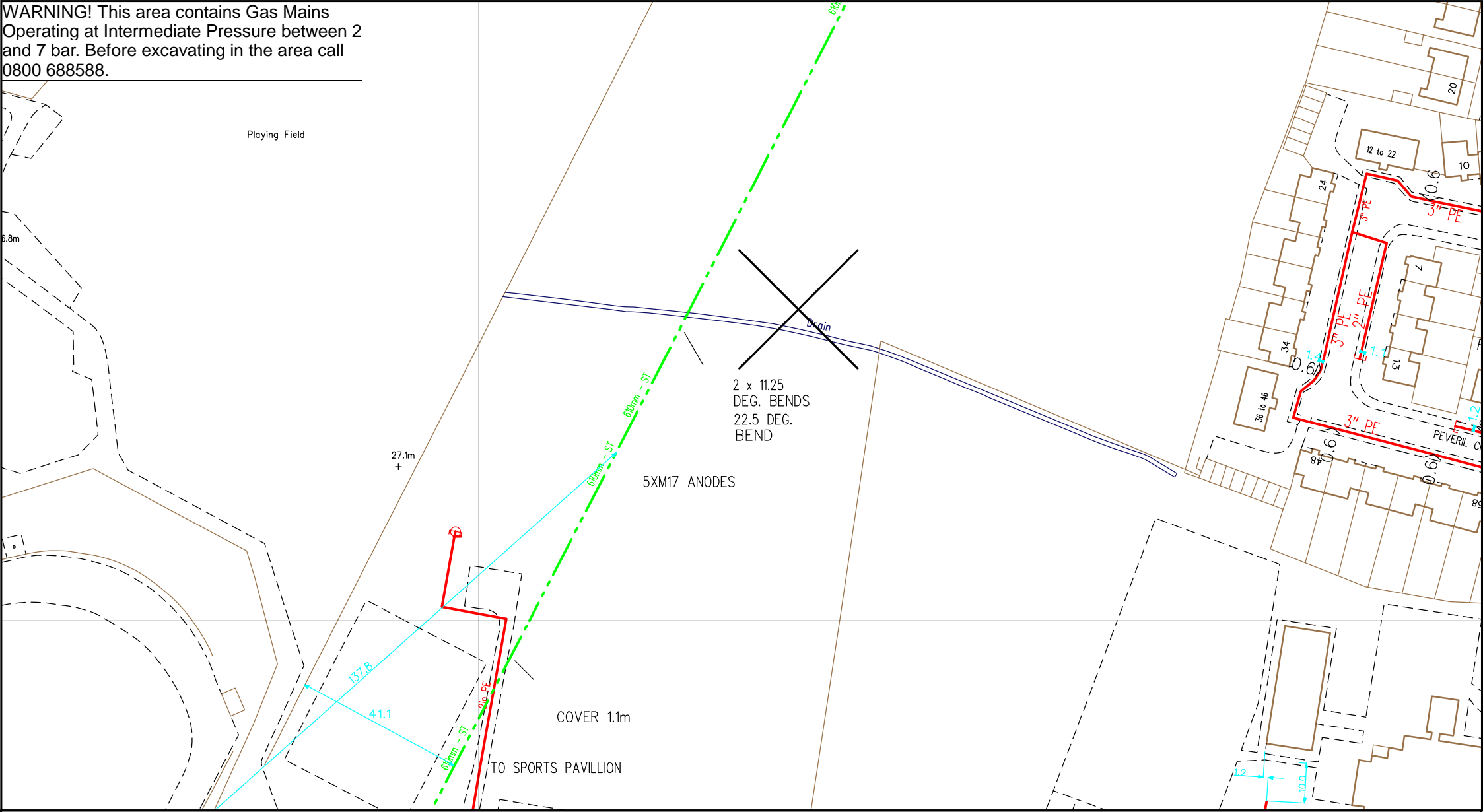
| | |
|-----------|--|
| LP MAINS | |
| MP MAINS | |
| IP MAINS | |
| LHP MAINS | |

This plan shows those pipes owned by Cadent Gas Ltd in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Ltd or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

MAPS Viewer Version 5.8.0.1
Local Machine
This plan is reproduced from or based on the OS map by Cadent Gas Ltd, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.



WARNING! This area contains Gas Mains Operating at Intermediate Pressure between 2 and 7 bar. Before excavating in the area call 0800 688588.



| |
|--------------------------|
| SCALE: 1 : 1250 |
| USER ID: Dave |
| DATE: 24/02/2020 |
| EXTRACT DATE: 02/09/2019 |
| MAP REF: SJ8194 |
| CENTRE: 381066, 394554 |

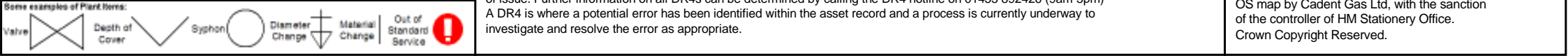
| | |
|-----------|--|
| LP MAINS | |
| MP MAINS | |
| IP MAINS | |
| LHP MAINS | |

This plan shows those pipes owned by Cadent Gas Ltd in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Ltd or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

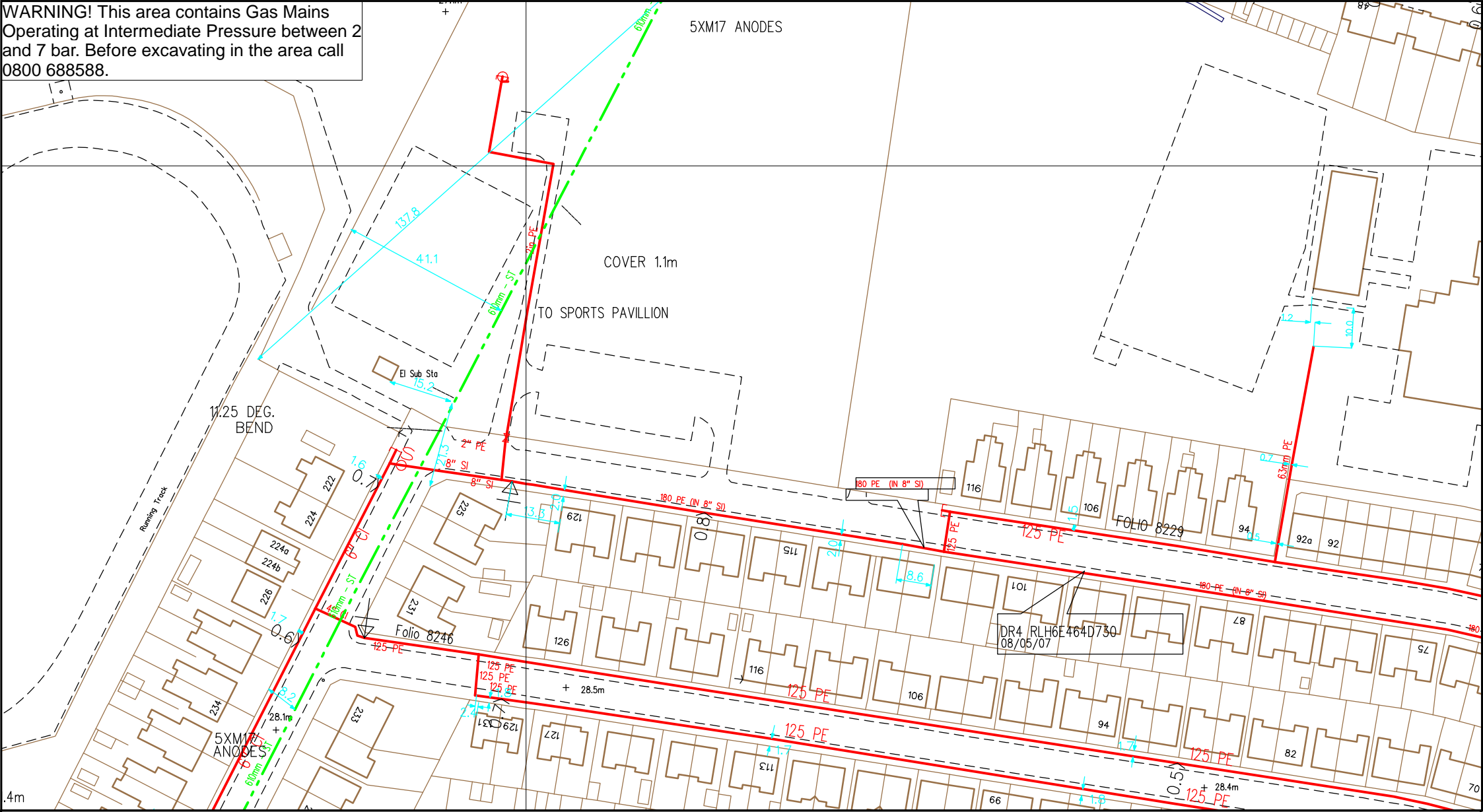
MAPS Viewer Version 5.8.0.1

Local Machine

This plan is reproduced from or based on the OS map by Cadent Gas Ltd, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.



WARNING! This area contains Gas Mains Operating at Intermediate Pressure between 2 and 7 bar. Before excavating in the area call 0800 688588.



| |
|--------------------------|
| SCALE: 1 : 1250 |
| USER ID: Dave |
| DATE: 24/02/2020 |
| EXTRACT DATE: 02/09/2019 |
| MAP REF: SJ8194 |
| CENTRE: 381054, 394440 |

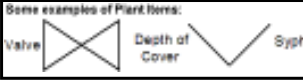
| | |
|-----------|--|
| LP MAINS | |
| MP MAINS | |
| IP MAINS | |
| LHP MAINS | |

This plan shows those pipes owned by Cadent Gas Ltd in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Ltd or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

MAPS Viewer Version 5.8.0.1

Local Machine

This plan is reproduced from or based on the OS map by Cadent Gas Ltd, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.



Dave Ibbotson

From: planrequest@enwl.co.uk
Sent: 17 October 2019 16:33
To: dave.ibbotson@fuelsolutions.co.uk
Subject: Plant Enquiry Ref Job No. 16748251
Attachments: 250797778_Electricity North West.pdf; ENW Conditions and Information regarding electricity mains.pdf; ENW_Response Letter.pdf

17/10/2019

Our Ref: 16748251
Your Ref: Ryebank Road

Dear Sir/Madam,

Please accept this email as confirmation that ENWL does have apparatus within the vicinity of your proposed works detailed below.

Please see attached network information.

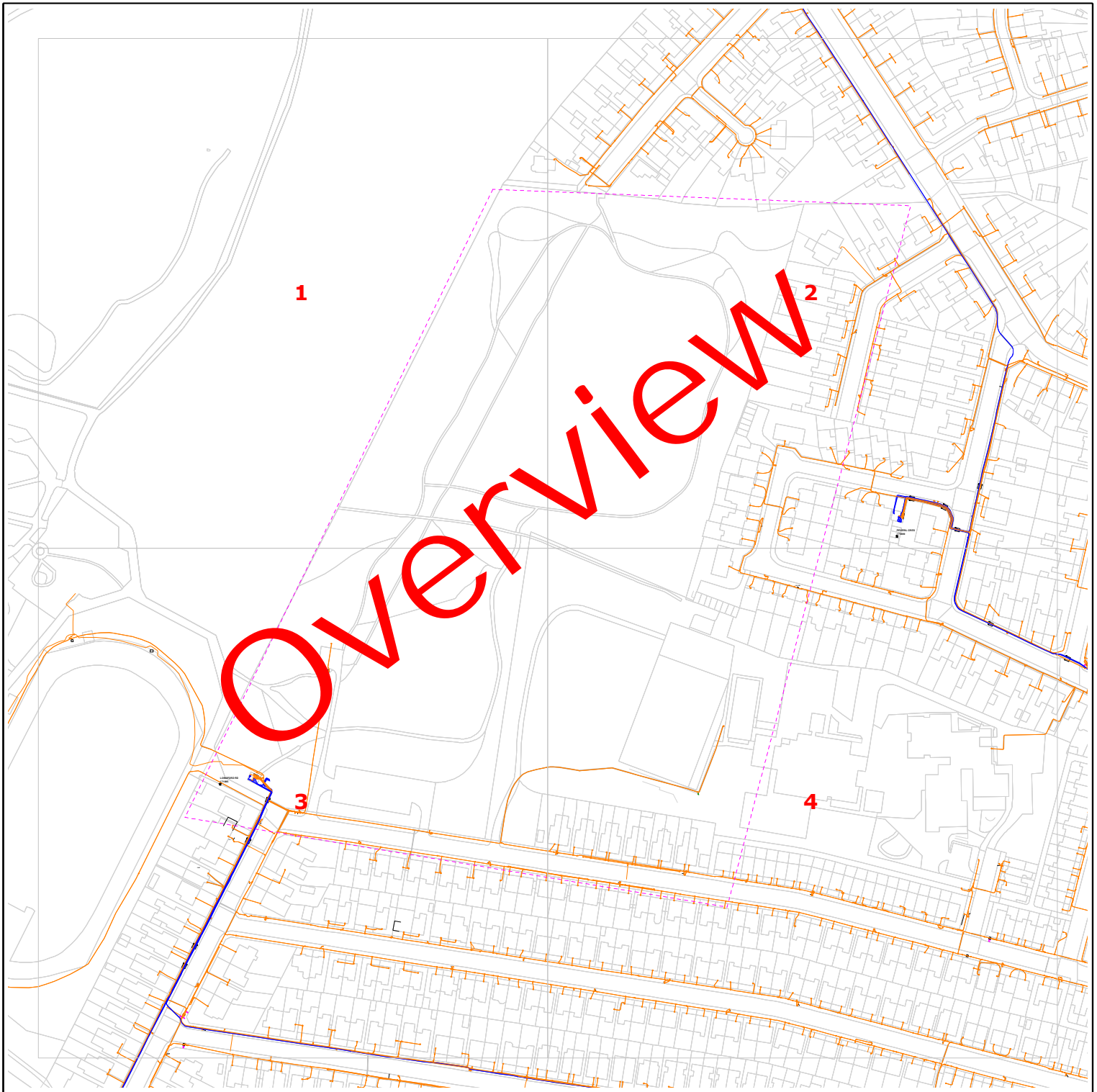
1. Letter
2. Plans (always print in colour)
3. Conditions and information regarding electricity mains

The attached files are in PDF format, to view them you will need Adobe Acrobat Reader(R). You can download it free of charge from <http://get.adobe.com/reader>

If we can help in any other way please email: planrequest@enwl.co.uk

Yours sincerely,

Data Management



Requested by: David Ibbotson
 Company: Fuel Solutions (UK) Limited
 Date Requested: 17/10/2019
 Job Reference: 16748251
 Your Scheme/Reference: Ryebank Road

| Operating Voltage | Colour Code | Line Colour |
|-------------------|-------------|-------------|
| 132kV | Black | |
| 33kV | Green | |
| 22kV-25kV | Yellow | |
| 11kV | Red | |
| 6kV-6.6kV | Blue | |
| 1kV-6kV | Violet | |
| LV | Orange | |
| Unknown Voltage | Brown | |



Dig Sites:
 Area Line

Data Management
 Electricity North West
 Linley House
 Dickinson Street
 Manchester, M1 4LF
 Phone: 0800 195 4141
 Email: planrequest@enwl.co.uk

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

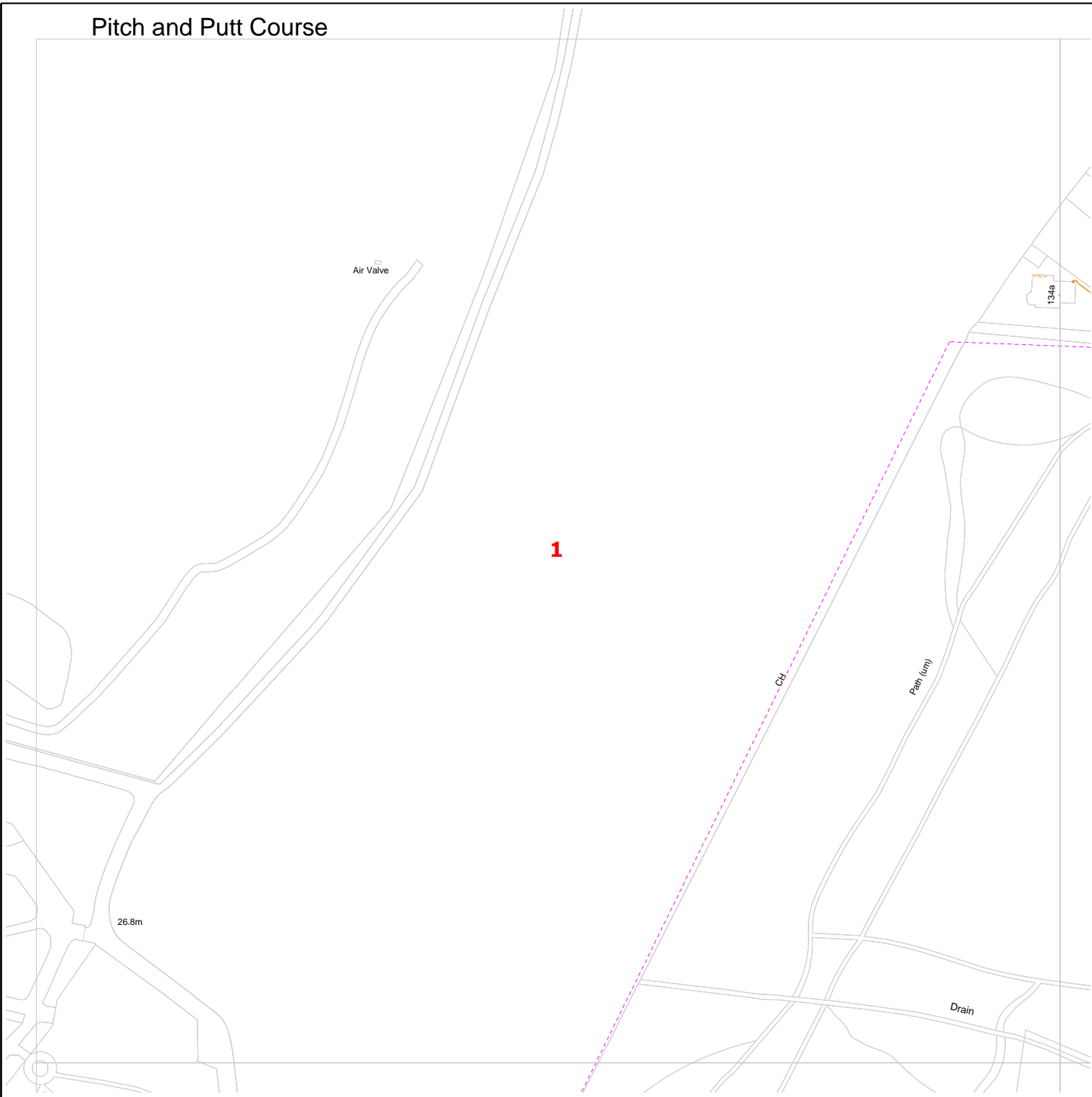
Scales on A4 paper:
 1:1250 Area dig site
 1:250 Line dig site

Reproduced from or based upon Ordnance Survey's map with the permission of Her Majesty's Stationary Office. Crown Copyright Reserved. LICENCE No. 100017892. Unauthorised reproduction may lead to Prosecution or Civil Proceedings.

Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949

Pitch and Putt Course



Requested by: David Ibbotson
 Company: Fuel Solutions (UK) Limited
 Date Requested: 17/10/2019
 Job Reference: 16748251
 Your Scheme/Reference: Ryebank Road

| Operating Voltage | Colour Code | Line Colour |
|-------------------|-------------|-------------|
| 132kV | Black | |
| 33kV | Green | |
| 22kV-25kV | Yellow | |
| 11kV | Red | |
| 6kV-6.6kV | Blue | |
| 1kV-6kV | Violet | |
| LV | Orange | |
| Unknown Voltage | Brown | |



Dig Sites:
 Area Line

Data Management
 Electricity North West
 Linley House
 Dickinson Street
 Manchester, M1 4LF
 Phone: 0800 195 4141
 Email: planrequest@enwl.co.uk

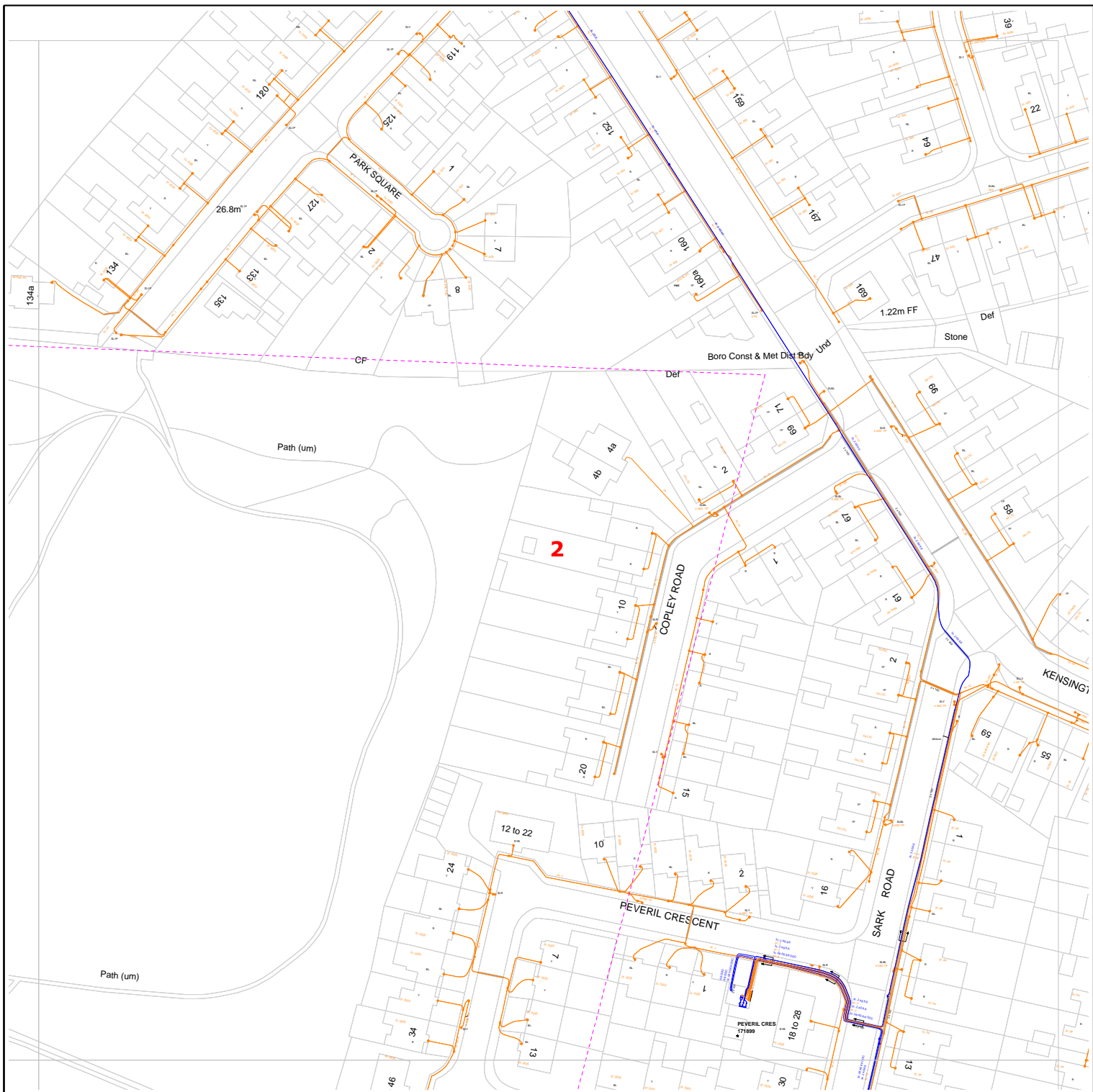
Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

Reproduced from or based upon Ordnance Survey's map with the permission of Her Majesty's Stationary Office. Crown Copyright Reserved. LICENCE No. 100017892. Unauthorised reproduction may lead to Prosecution or Civil Proceedings.

Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949

Scales on A4 paper:
 1:1250 Area dig site
 1:250 Line dig site



Requested by: David Ibbotson
 Company: Fuel Solutions (UK) Limited
 Date Requested: 17/10/2019
 Job Reference: 16748251
 Your Scheme/Reference: Ryebank Road

| Operating Voltage | Colour Code | Line Colour |
|-------------------|-------------|-------------|
| 132kV | Black | |
| 33kV | Green | |
| 22kV-25kV | Yellow | |
| 11kV | Red | |
| 6kV-6.6kV | Blue | |
| 1kV-6kV | Violet | |
| LV | Orange | |
| Unknown Voltage | Brown | |



Dig Sites:
 Area Line

Data Management
 Electricity North West
 Linley House
 Dickinson Street
 Manchester, M1 4LF
 Phone: 0800 195 4141
 Email: planrequest@enwl.co.uk

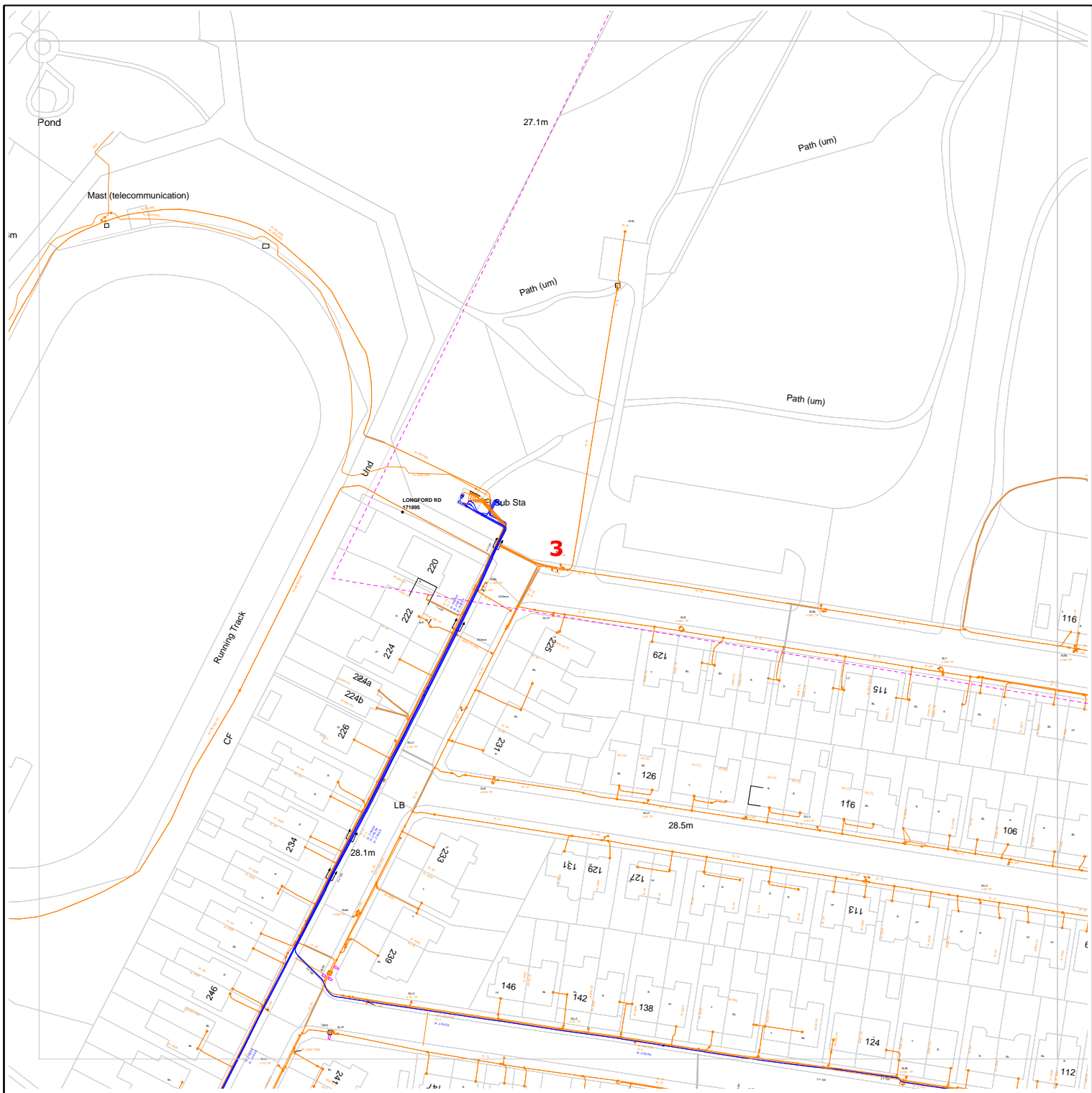
Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

Scales on A4 paper:
 1:1250 Area dig site
 1:250 Line dig site

Reproduced from or based upon Ordnance Survey's map with the permission of Her Majesty's Stationary Office. Crown Copyright Reserved. LICENCE No. 100017892. Unauthorised reproduction may lead to Prosecution or Civil Proceedings.

Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949



Requested by: David Ibbotson
 Company: Fuel Solutions (UK) Limited
 Date Requested: 17/10/2019
 Job Reference: 16748251
 Your Scheme/Reference: Ryebank Road

| Operating Voltage | Colour Code | Line Colour |
|-------------------|-------------|-------------|
| 132kV | Black | |
| 33kV | Green | |
| 22kV-25kV | Yellow | |
| 11kV | Red | |
| 6kV-6.6kV | Blue | |
| 1kV-6kV | Violet | |
| LV | Orange | |
| Unknown Voltage | Brown | |



Dig Sites:
 Area Line

Data Management
 Electricity North West
 Linley House
 Dickinson Street
 Manchester, M1 4LF
 Phone: 0800 195 4141
 Email: planrequest@enwl.co.uk

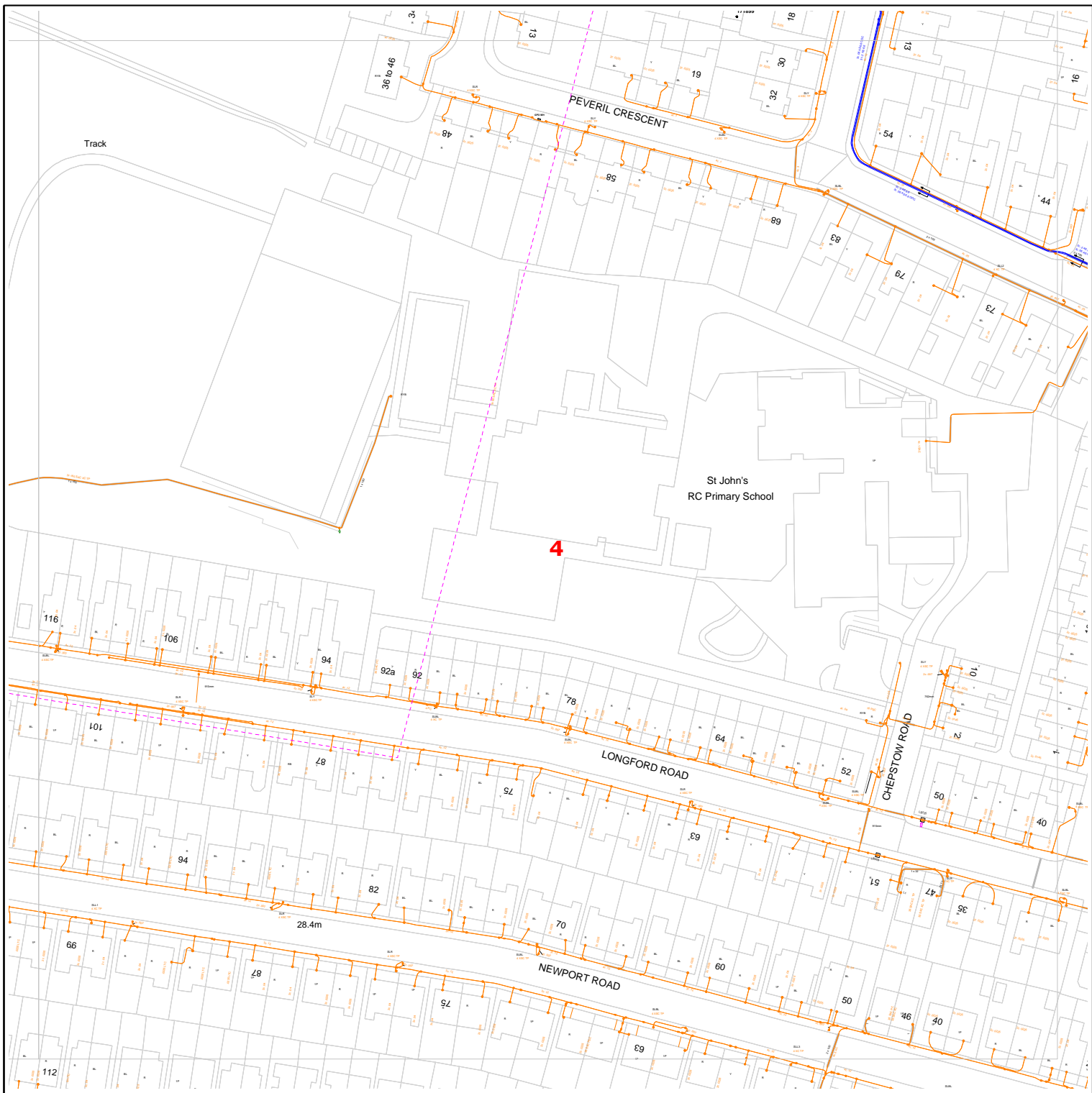
Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

Scales on A4 paper:
 1:1250 Area dig site
 1:250 Line dig site

Reproduced from or based upon Ordnance Survey's map with the permission of Her Majesty's Stationary Office. Crown Copyright Reserved. LICENCE No. 100017892. Unauthorised reproduction may lead to Prosecution or Civil Proceedings.

Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949



Requested by: David Ibbotson
 Company: Fuel Solutions (UK) Limited
 Date Requested: 17/10/2019
 Job Reference: 16748251
 Your Scheme/Reference: Ryebank Road

| Operating Voltage | Colour Code | Line Colour |
|-------------------|-------------|-------------|
| 132kV | Black | |
| 33kV | Green | |
| 22kV-25kV | Yellow | |
| 11kV | Red | |
| 6kV-6.6kV | Blue | |
| 1kV-6kV | Violet | |
| LV | Orange | |
| Unknown Voltage | Brown | |



Dig Sites:
 Area Line

Data Management
 Electricity North West
 Linley House
 Dickinson Street
 Manchester, M1 4LF
 Phone: 0800 195 4141
 Email: planrequest@enwl.co.uk

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

Reproduced from or based upon Ordnance Survey's map with the permission of Her Majesty's Stationary Office. Crown Copyright Reserved. LICENCE No. 100017892. Unauthorised reproduction may lead to Prosecution or Civil Proceedings.

Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949

Scales on A4 paper:
 1:1250 Area dig site
 1:250 Line dig site

Conditions and information regarding electricity mains

These general conditions and precautions apply to the electricity distribution system of Electricity North West Limited.

Please ensure that a copy of these conditions is passed to your representative and contractor on site.

1. There may be other Electricity North West Limited apparatus in the vicinity, which is not indicated on the cable records. Other apparatus may also be present which a third party owns other than Electricity North West Limited

2. Before any machines are used all of Electricity North West's underground apparatus should be located by manual excavation taking the appropriate safety precautions in accordance with the **Health and Safety Executive Guidance note HS(G)47 "Avoiding danger from underground services"**. This contains advice to site personnel when working near underground services.

Underground services, particularly electricity and gas, can be dangerous. Damage to electricity cables can cause a dangerous flash, leading to severe burns or even death. Gas leaks can cause fire or explosion.

Damage can result from excavation or penetration of the ground, e.g. by a road pin.

Underground services may be found in roads, footpaths and on sites. Always assume that they are present. Treat any services found anywhere as live.

Accidents have happened because people have mistaken one service for another, e.g. black plastic covered electricity cables look like black plastic water pipes and cast iron gas and water mains look alike. Check before you act.

3. Before starting work you must:
 - Make sure you have plans of the underground services in the area. This may not always be possible for emergency or unforeseen works. **Remember that service connection cables and pipes from the main to building or streetlight may not be shown.**
 - Use a cable and pipe locator to trace electricity cables and metal pipes.
 - Look for signs of service connection cables or pipes, e.g. a gas meter or service connection entry into a house or a streetlight.
 - Hand dig trial holes (as many as necessary) to confirm the position of services in close proximity to the area of work.

4. When you start work:

- Hand dig near buried services whenever possible. Spades and shovels are safer than picks, pins or forks.
- Remember that cables may be embedded in concrete. Electricity cables embedded in concrete **must** either be made dead before the concrete is broken out or another safe way of working agreed with the cable owner.
- Watch out for signs of services as work continues.
- Report damage to a cable, pipe or pipe coating however slight.
- Do not use hand held power tools within 0.5m of the marked position of an electricity cable, unless this is impracticable and the line of the cable has been identified by plans and positively confirmed by a locator.
- Do not use hand held power tools directly over the marked line of cable unless:
 - a) You have already found the cable at that position by careful hand digging beneath the surface and it is at a safe depth (at least 300mm) below the bottom of the surface to be broken, or
 - b) Physical means have been used to prevent the tool striking it.
- If an excavator is used near an electricity cable keep everyone clear of the bucket while it is digging. Buckets should not be used near cable – hand dig.
- Do not use exposed services as a convenient step or handhold.
- Do not handle or attempt to alter the position of an exposed service.
- Do not install plant close to an existing service.
- Do not build existing services into a manhole or other structure or encase them in concrete.

Would you also ensure that all site operators have this information and if any electrical apparatus is damaged, they/you should contact Electricity North West Limited fault desk on **0800 195 4141 (option 1)**

5. Overhead lines are not necessarily shown on the Electricity North West Limited cable records but may be present. In the event of work being carried out adjacent to overhead lines (including access, storage etc.) please always ensure strict adherence to the requirements of the **Health and Safety Executive's Document GS6 "Avoidance of Danger from Overhead Electric Lines"**.

Extreme personal danger can result from contact, or near contact, with live conductors or overhead lines.

Treat all overhead lines and other electrical apparatus as live. If in doubt, get advice.

6. Electricity North West Limited must be consulted if work is to take place within 15 metres of overhead lines on steel towers or 9 metres of overhead lines on wood, concrete or steel pylons. (All distances should be measured at ground level from a position estimated by eye to be vertically under the outermost conductor at a tower or pole position) Any person involved in work in the vicinity of overhead lines should:
- Understand and follow the instructions given on safe working areas and methods of work.
 - Make sure that warning notices are in the cabs of machines working in the vicinity of an overhead line.
 - Make sure that barriers and warning notices are erected as required.
 - Not tip soil or stack material underneath overhead lines as this may reduce the clearance to an unsafe distance.
 - Make sure when handling or using platforms, scaffold, poles, piping, ladders, hand tools etc., that they are kept at a safe distance from overhead lines.
 - Not steady a suspended load, skip, hoist wire, slings etc., unless satisfied that there isn't any danger from overhead lines.
 - Remember that when mobile plant, such as a crane or excavator, is operating near overhead lines, the raising or slewing of the jib may introduce danger.
 - Always keep overhead lines in view when manoeuvring mobile plant.
 - Never operate a machine unless carefully guided by an experienced banksman.
 - Not approach or touch any broken or fallen conductors or any plant in contact with an overhead line before Electricity North West Limited confirms that conditions are safe. Warn others to keep well clear.

Machine operators should note that: if a machine comes into contact with an overhead line and cannot be disentangled by backing off, remain seated in the cab and warn others to keep clear of the machine until Electricity North West Limited confirms that conditions are safe. If it is essential to

leave the machine while it is in contact with the overhead line, for example if it catches fire, jump well clear – and **do not** attempt to climb down in the normal way nor touch any part of the machine when on the ground.

7. Electricity North West Limited provides approximate locations of its electricity mains or apparatus according to its records but these records are not necessarily accurate or complete and do not always show the position of private cables from mains to properties. No person or company shall be relieved from liability for any damage caused by reason of the actual positions and/or depths being different from those indicated.

8. Care should be taken when excavating near cables. Known road crossings are highlighted on the enclosed plans. Should any cable, or Electricity North West Limited apparatus indicated on the attached plans, be affected by your proposals please contact us as follows:

Data Management
Linley House
Dickinson St
Manchester
M1 4LF

Telephone: **0800 195 4141 (option 2)**

Details of diversion costs, if any, will be provided on request once your firm proposals have been submitted.

9. Please note that service cables may be affected by some of the works being carried out on site.

If any services do require temporary disconnection please phone **0800 195 4141 (option 2)** for domestic and commercial disconnection, so that arrangement can be made to disconnect before work commences on site.

10. For information regarding supplies please contact us on **0800 195 4141 (option 2)**.
11. Please note that cable records supplied may not be up to date, or may be incomplete, if the area concerned is a new site.
12. For information regarding wayleave or easement agreements contact:

| | |
|------------|---------------------|
| Manchester | 08433 115157 |
| Preston | 08433 113969 |
| Kendal | 08433 115155 |

13. The latest cable records are always available for inspection during normal working hours and you should satisfy yourself that the information you have is up to date at the time you commence work. This service is consistent with the requirement of Regulation 36 of the Electricity Supply Regulations and paragraph 79 of the New Road and Street Works Act.

Please contact Data Management on **0800 195 4141 (option 2)** to arrange an appointment to view the records.



304 Bridgewater Place
Birchwood Park
Warrington
WA3 6XG

www.enwl.co.uk

Registered in England and Wales
Registered Number 2366949



Electricity North West
Data Management,
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk
Web: www.enwl.co.uk

Mr David Ibbotson
Fuel Solutions (UK) Limited
Parkfield Business Centre Park Street
Stafford Staffordshire
ST17 4AL

Our Reference: 16748251

Your Reference: Ryebank Road

Dear Mr David Ibbotson

Electricity Network Plans

I acknowledge with thanks your request dated 17/10/2019 03:29:09 PM for information on the location of our services.

Please find enclosed plan(s) showing the approximate position of our apparatus known to be in the vicinity of this site.

I attach Conditions and information regarding electricity mains, which details contact numbers for additional services (i.e. new supplies, connections, diversion). In addition you should ensure they are made available to anyone carrying out any works which may affect our apparatus.

Yours sincerely,

Data Management

Our Ref: Ref shown on map

Date of issue: shown on map

email: nnhc@openreach.co.uk

Dear Customer,

NR & SW ACT 1991 – PROPOSED WORKS AT: **SITE LOCATION**

Prior to commencement of work: For free onsite guidance and accurate up to date location of BT Apparatus please contact our Plant Protection Service by the following methods:-

Email the Click Before You Dig Team CBYD@openreach.co.uk

Visit the Click Before You Dig Website www.openreach.co.uk/cbyd

Thank you for your request of **/**/** describing the above proposals.

Enclosed are copies of our drawings marked up to show the approximate locations of BT apparatus in the immediate vicinity of your works. It is intended for general guidance only. No guarantee is given of its accuracy.

The drawings are valid for 90 days from the date of issue and should not be relied upon after this time period has expired.

When planning excavation work or other works near to BT apparatus, please be mindful our apparatus may exist at various depths and may deviate from the marked route.

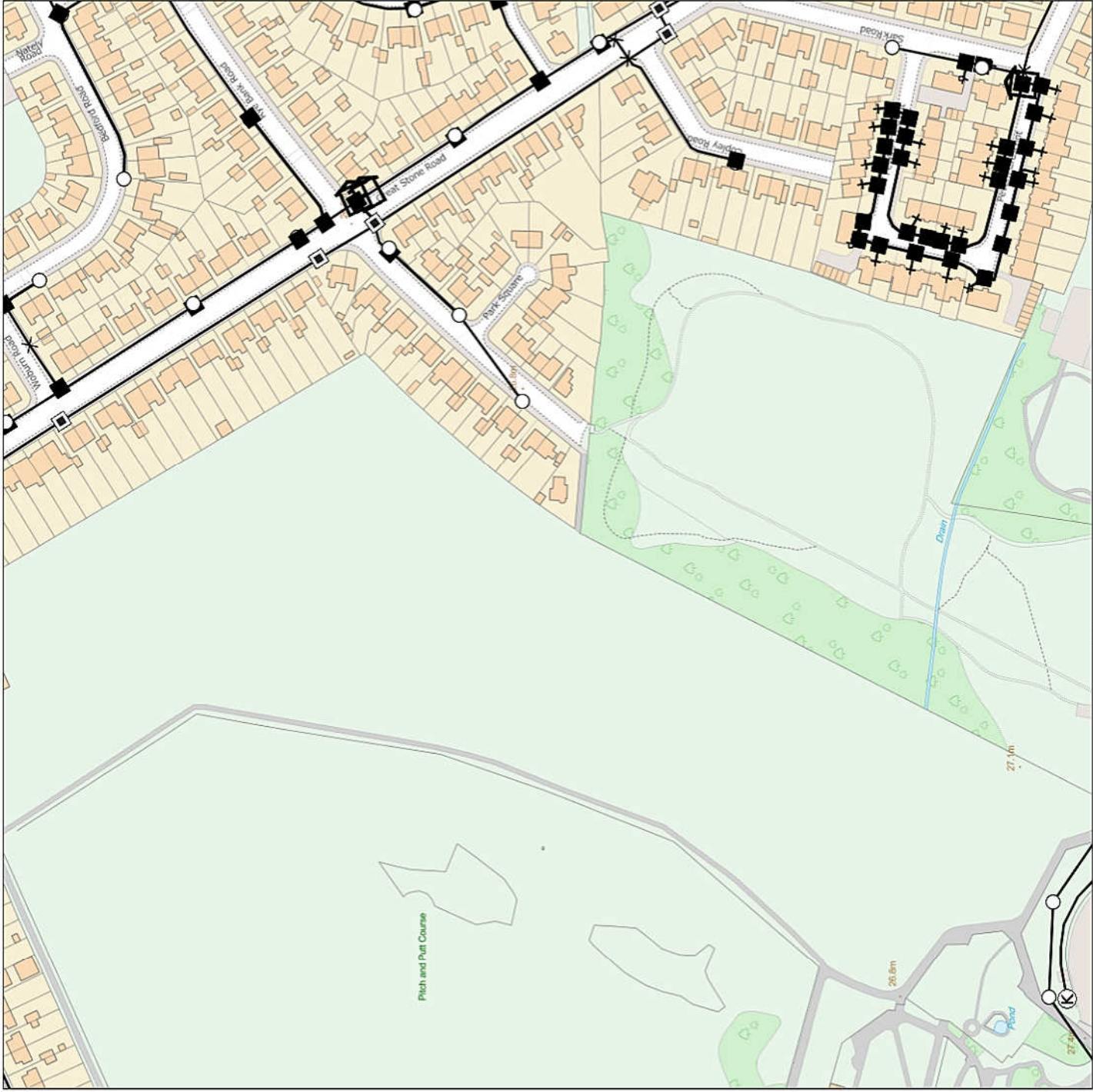
To avoid damage it is recommended that mechanical excavators or borers are not used within 600mm of BT apparatus. If scaffolding is erected, please ensure that our equipment is not enclosed, blocked, covered or otherwise obstructed by the scaffolding.

In the event of BT apparatus being in the area of your works we recommend that your plant/vehicle crossing is either resited, or apply for a budget estimate by submitting detailed plans to our Network Relocation Team at <https://www.ournetwork.openreach.co.uk/altering-our-network.aspx>

Yours faithfully,

Julie Cullum
NNHC & MBE Manager

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG
 FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE
 email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
 (Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

KEY TO BT SYMBOLS

| | Planned | Live |
|---------|---------|------|
| PCP | | |
| Pole | | |
| Box | | |
| Manhole | | |
| Cabinet | | |

| Change Of State | + | X | ▲ | ■ | Ⓚ |
|-----------------|---|---|---|---|---|
| Split Coupling | | | | | |
| Duct Tee | | | | | |
| Building | | | | | |
| Kiosk | | | | | |

| Hatchings | Built | Planned | Inferred | Duct |
|-----------|-------|---------|----------|------|
| | | | | |

Other proposed plant is shown using dashed lines.
 BT Symbols not listed above may be disregarded.
 Existing BT Plant may not be recorded.
 Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.

| | Pending Add | In Place | Pending Remove | Not in Use |
|-------------|-------------|----------|----------------|------------|
| Power Cable | | | | |
| Power Duct | | | | N/A |

Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office

(C) Crown Copyright British Telecommunications plc 100028040

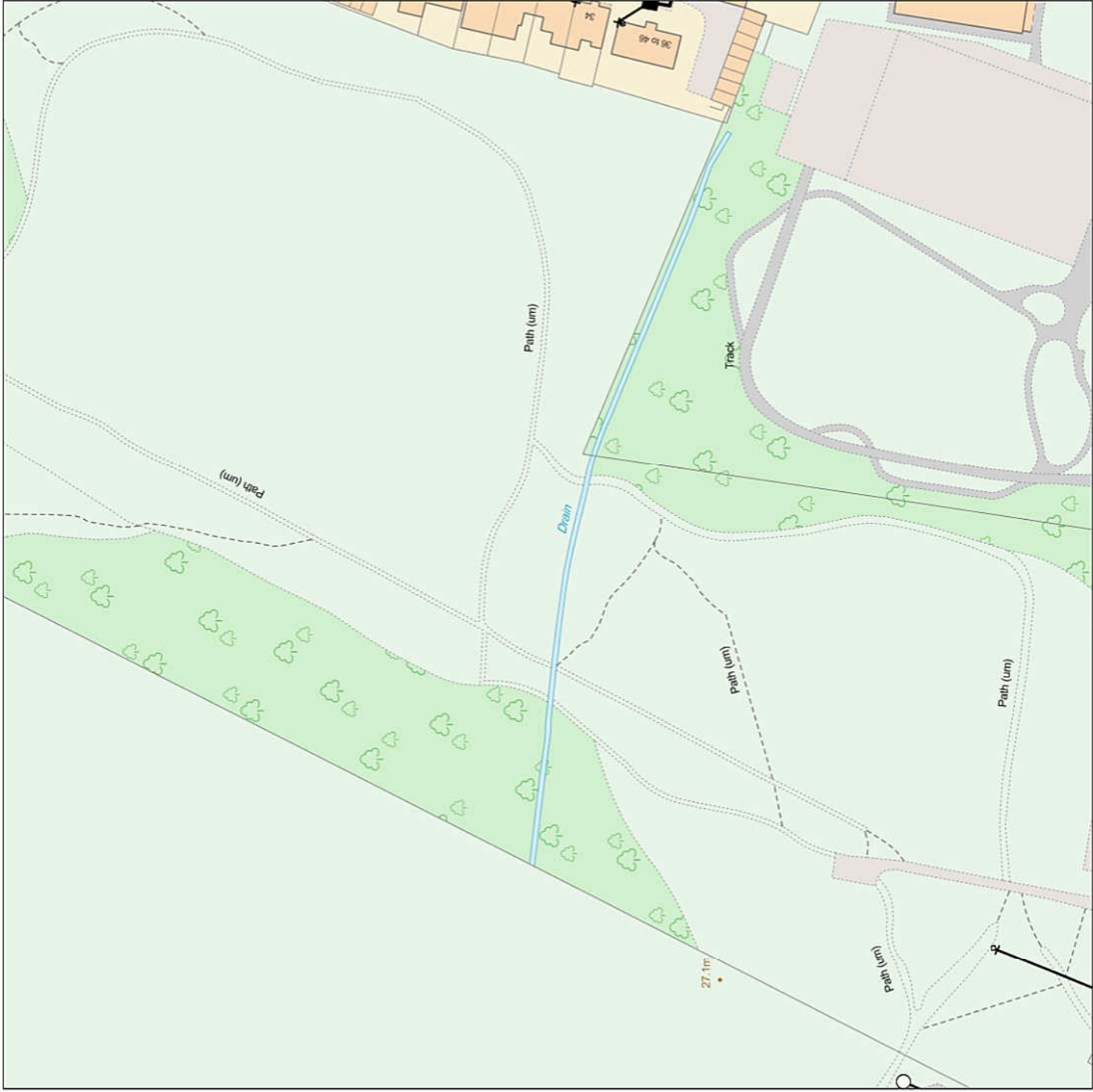
BT Ref : GRG06303G

Map Reference : (centre) SJ8108294755
 Easting/Northing : (centre) 381082, 394755

Issued : 24/02/2020 18:30:56

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Maps by email Plant Information Reply



IMPORTANT WARNING
 Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG
 FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE
 email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
 (Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

Accidents happen

if you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

KEY TO BT SYMBOLS

| | |
|---------|----------------|
| Planned | Live |
| PCP | Split Coupling |
| Pole | Duct Tee |
| Box | Building |
| Manhole | Kiosk |
| Cabinet | |

| | |
|-----------------|-----------|
| Change Of State | Hatchings |
| + | Built |
| X | Planned |
| ▲ | Inferred |
| ■ | Duct |
| Ⓚ | |

Other proposed plant is shown using dashed lines.
 BT Symbols not listed above may be disregarded.
 Existing BT Plant may not be recorded.
 Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.

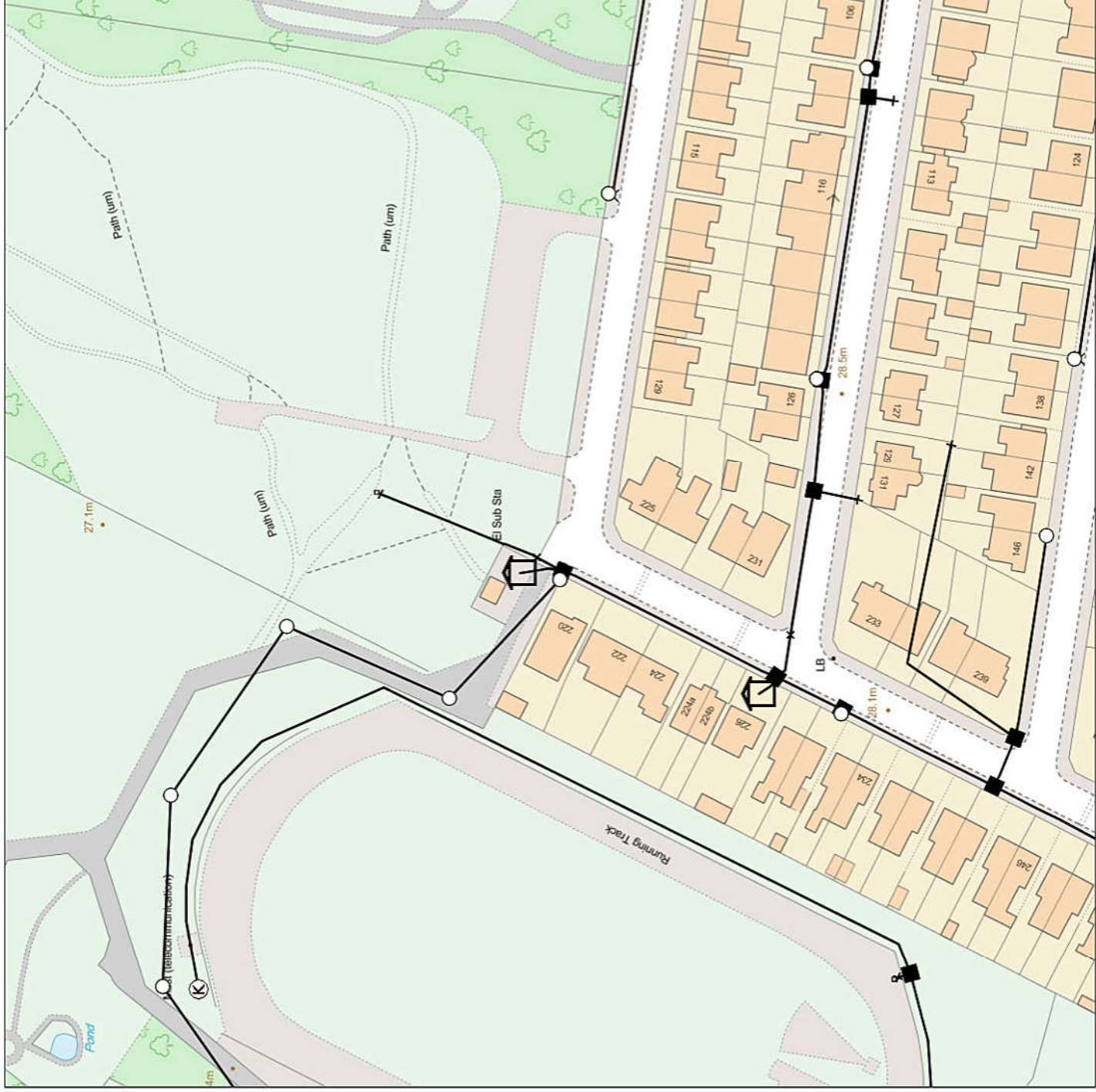
| | | | |
|-------------|-------------|----------------|-------------|
| Pending Add | In Place | Pending Remove | Not in Use |
| Power Cable | Power Cable | Power Cable | Power Cable |
| Power Duct | Power Duct | Power Duct | N/A |

Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office
 (C) Crown Copyright British Telecommunications plc 100028040

BT Ref : KMH06302U
 Map Reference : (centre) SJ8108094578
 Easting/Northing : (centre) 381080, 394578
 Issued : 24/02/2020 18:30:35

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Maps by email Plant Information Reply



IMPORTANT WARNING
 Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



openreach

CLICK BEFORE YOU DIG
 FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE
 email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
 (Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

Accidents happen

if you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office
 (C) Crown Copyright British Telecommunications plc 100028040

KEY TO BT SYMBOLS

| | Planned | Live | |
|---------|---------|------|--|
| PCP | | | |
| Pole | | | |
| Box | | | |
| Manhole | | | |
| Cabinet | | | |

| Change Of State | Hatchings |
|-----------------|-----------|
| + | |
| × | |
| ▲ | |
| ■ | |
| Ⓚ | |

Other proposed plant is shown using dashed lines.
 BT Symbols not listed above may be disregarded.
 Existing BT Plant may not be recorded.
 Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.

| | Pending Add | In Place | Not in Use |
|-------------|-------------|----------|------------|
| Power Cable | | | |
| Power Duct | | | N/A |

BT Ref : FFP06293G
 Map Reference : (centre) SJ8097694436
 Easting/Northing : (centre) 380976, 394436
 Issued : 24/02/2020 18:29:41

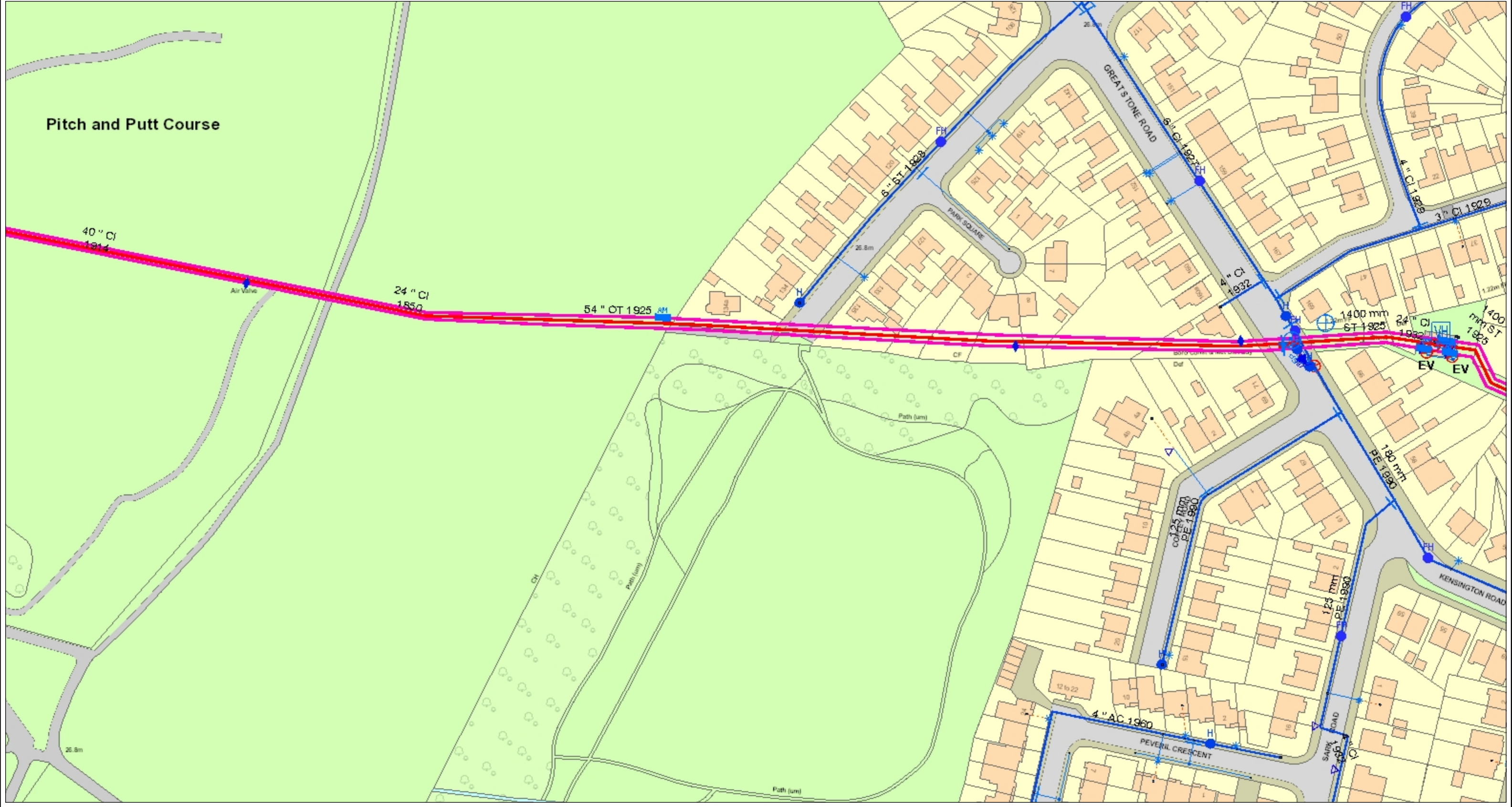
WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

United Utilities Maps for SafeDig

Centre : X : 381118 Y : 394716

Date : 24/02/2020 14:11:43

Scale Approx : 1250



Extract from maps of United Utilities' Underground Assets

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private service pipes may be shown by a blue broken line. United Utilities Water will not accept liability for any damage caused by the actual position being different from those shown.

Crown copyright and database rights 2019. Ordnance Survey 100022432 This plan is based on the Ordnance Survey Map with the sanction of the Controller of H.M. Stationary Office. Crown and United Utilities Water copyrights are reserved. Unauthorised reproduction will infringe these copyrights.

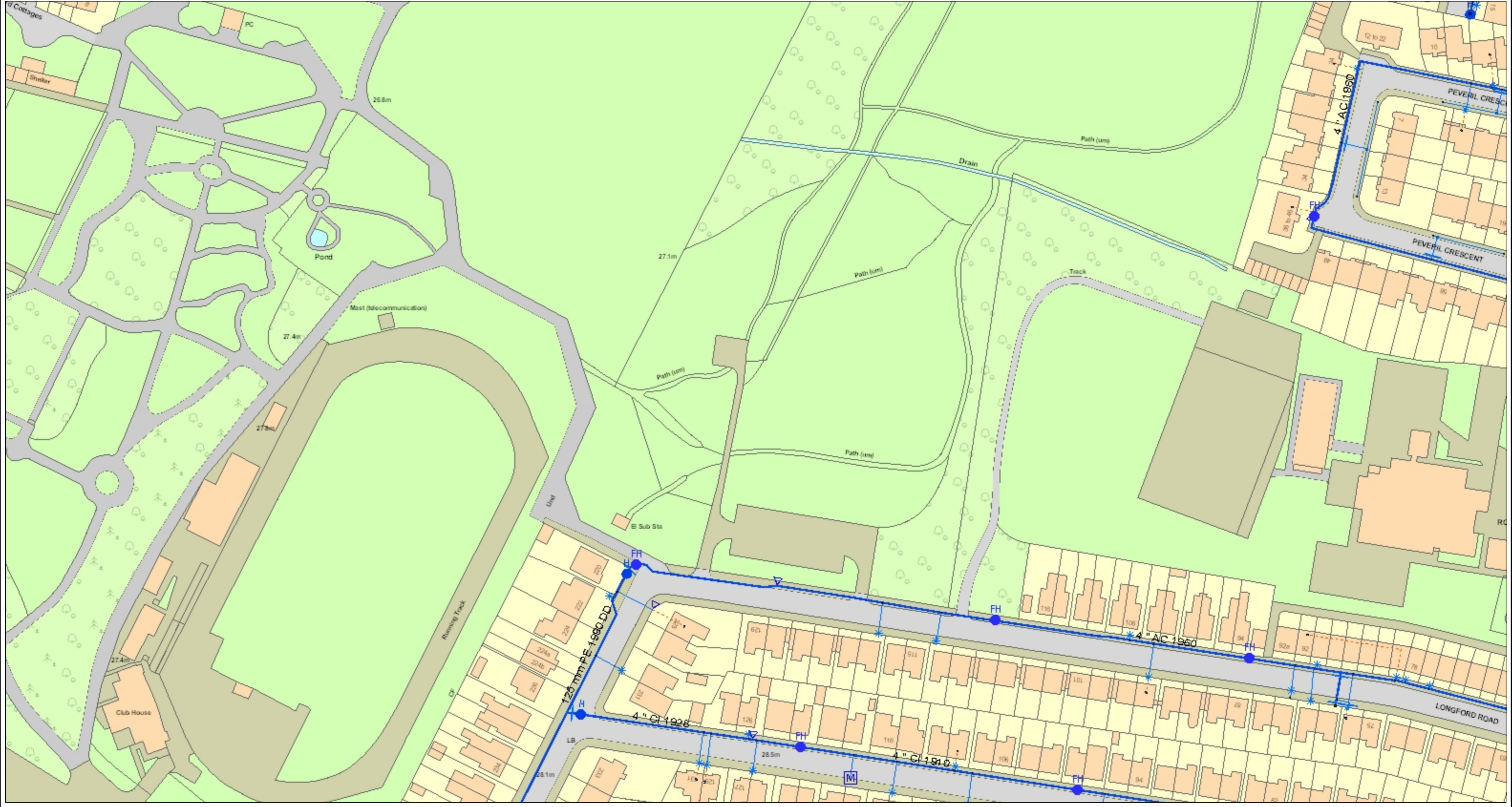


United Utilities Maps for SafeDig

Centre : X : 381011 Y : 394490

Date : 24/02/2020 14:10:54

Scale Approx : 1250



Extract from maps of United Utilities' Underground Assets

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private service pipes may be shown by a blue broken line. United Utilities Water will not accept liability for any damage caused by the actual position being different from those shown.

Crown copyright and database rights 2019. Ordnance Survey 100022432 This plan is based on the Ordnance Survey Map with the sanction of the Controller of H.M. Stationary Office. Crown and United Utilities Water copyrights are reserved. Unauthorised reproduction will infringe these copyrights.

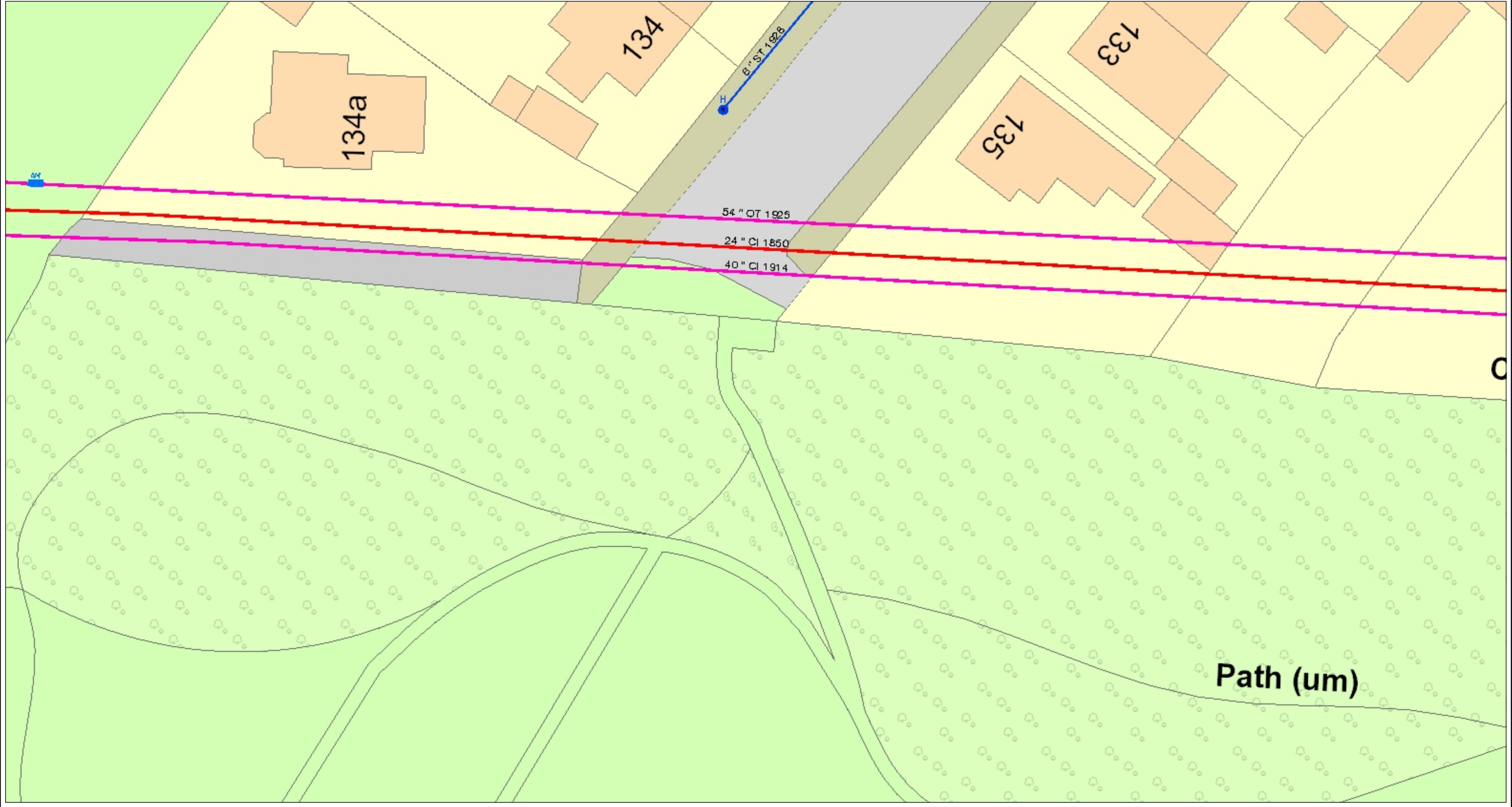


United Utilities Maps for SafeDig

Centre : X : 381135 Y : 394730

Date : 24/02/2020 14:12:43

Scale Approx : 250.000000000079



Extract from maps of United Utilities' Underground Assets

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private service pipes may be shown by a blue broken line. United Utilities Water will not accept liability for any damage caused by the actual position being different from those shown.

Crown copyright and database rights 2019. Ordnance Survey 100022432 This plan is based on the Ordnance Survey Map with the sanction of the Controller of H.M. Stationary Office. Crown and United Utilities Water copyrights are reserved. Unauthorised reproduction will infringe these copyrights.

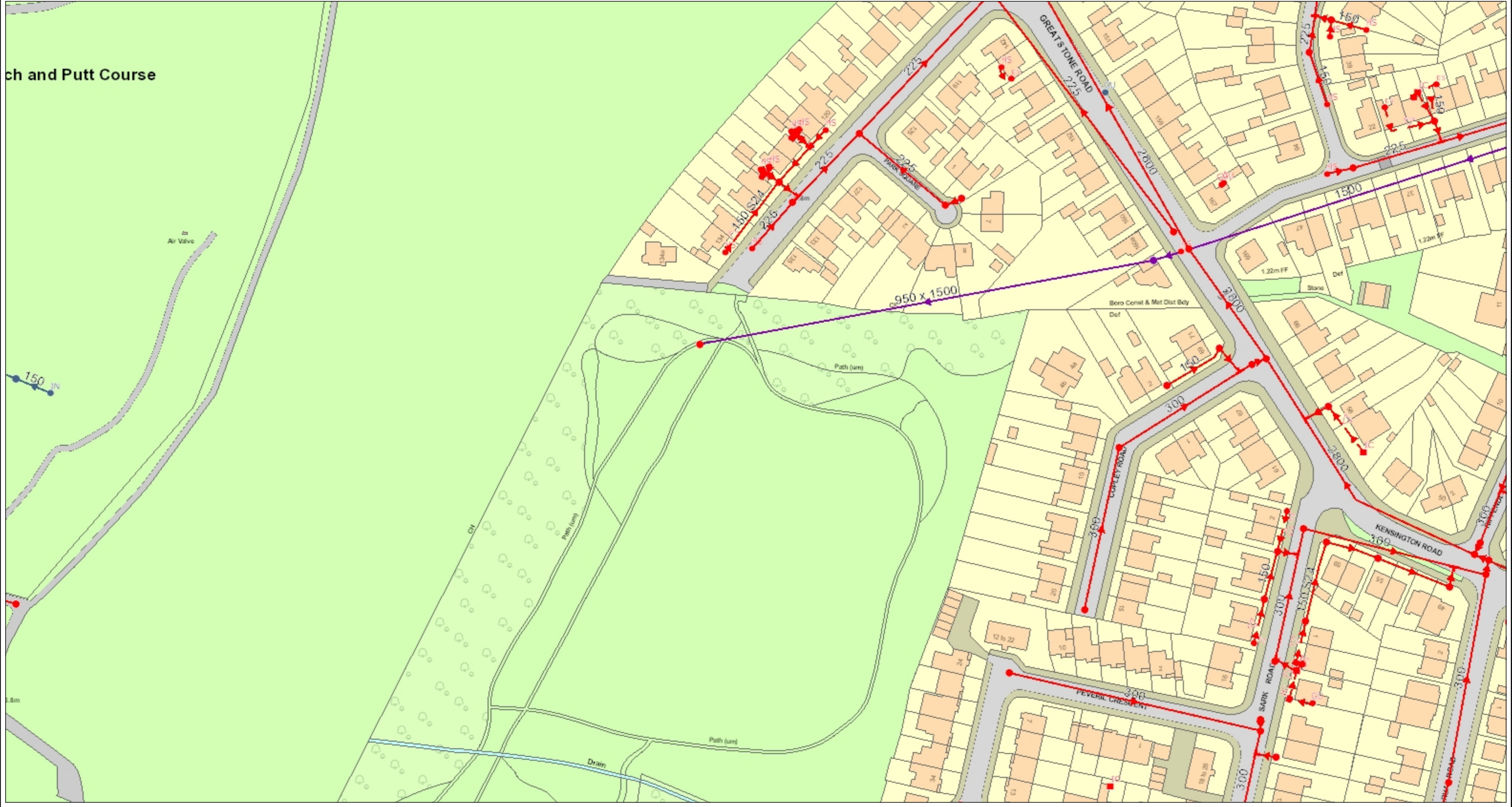


United Utilities Maps for SafeDig

Centre : X : 381140 Y : 394698

Date : 24/02/2020 14:20:51

Scale Approx : 1250



Extract from maps of United Utilities' Underground Assets

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private service pipes may be shown by a blue broken line. United Utilities Water will not accept liability for any damage caused by the actual position being different from those shown.

Crown copyright and database rights 2019. Ordnance Survey 100022432 This plan is based on the Ordnance Survey Map with the sanction of the Controller of H.M. Stationary Office. Crown and United Utilities Water copyrights are reserved. Unauthorised reproduction will infringe these copyrights.



United Utilities Maps for SafeDig

Centre : X : 381017 Y : 394472

Date : 24/02/2020 14:21:30

Scale Approx : 1250



Extract from maps of United Utilities' Underground Assets

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private service pipes may be shown by a blue broken line. United Utilities Water will not accept liability for any damage caused by the actual position being different from those shown.

Crown copyright and database rights 2019. Ordnance Survey 100022432 This plan is based on the Ordnance Survey Map with the sanction of the Controller of H.M. Stationary Office. Crown and United Utilities Water copyrights are reserved. Unauthorised reproduction will infringe these copyrights.



APPENDIX 2

Not Affected
Utility Responses

Dave Ibbotson

From: Plantenquiries <Plantenquiries@instalcom.co.uk>
Sent: 06 February 2020 13:44
To: 'Dave Ibbotson'
Subject: RE: E02-20-1275 Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir or Madam,

Thank you for your plant enquiry below.

We can confirm that CenturyLink Communications UK Limited (formerly Level 3), Global Crossing (Uk) Ltd, Global Crossing PEC, Fibernet UK Ltd and Fibrespan Ltd do not have any apparatus within the indicated works area.

Instalcom responds to plant enquiries for all of the above and therefore you only need send one plant enquiry to cover all of these companies.

Please note that this response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence.

Regards

Plant Enquiries Administrator



Instalcom Limited
Borehamwood Ind Park
Rowley Lane
Borehamwood
WD6 5PZ

Office: +44 (0)208 731 4613
Fax: +44 (0)208 731 4601
Email: plantenquiries@instalcom.co.uk
Web: <http://www.instalcom.co.uk>



From: Dave Ibbotson [mailto:dave.ibbotson@fuelsolutions.co.uk]

Sent: 30 January 2020 17:28

To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; Plantenquiries <Plantenquiries@instalcom.co.uk>; interroute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk; telenttelia.plantenquiries@telent.com;

plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk;
plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com;
OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com;
assetrecords@utilityassets.co.uk; info@hibernianetworks.com; nrswa@cofely-gdfsuez.com;
plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; KPN
Plant Enquiries <kpn.plantenquiries@instalcom.co.uk>; SOTA Plant Enquiries
<SOTA.PlantEnquiries@instalcom.co.uk>; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com
Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E
380918 N 394453

Dear Sir / Madam

**Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453**

**Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022**

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorised to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

Dave Ibbotson

From: online.plantenquiries@cityfibre.com
Sent: 24 February 2020 18:45
To: dave.ibbotson@fuelsolutions.co.uk
Subject: CityFibre Plant Enquiry, issued on 2/24/20 6:45 PM. Reference db201a4b-1c63-4e21-958c-0dcd94174a51.
Attachments: emap.pdf

You recently requested information pertaining to the above location and in relation to CityFibre Holdings Ltd plant.

Reference db201a4b-1c63-4e21-958c-0dcd94174a51

User: User

Title: Ryebank Road

Comment:

Please find attached a plan of the area of your interest that may contain plant which may be affected by your proposed works.

The validity of this response is 6 weeks, after such time a new enquiry would need to be made.

Please see the points of contact below if they are required:

Plant Enquiries
Rutherford House
Birchwood Park
Warrington
WA3 6ZH
asset.team@cityfibre.com

Please quote the Reference ID in the subject line in any correspondence.

Please be aware that all information included in this eMap is the property of the sender and subject to copyright. It is illegal to copy or send this information to any third party without the permission of the sender.

Plant Enquiries [CityFibre]

0203 5100 602

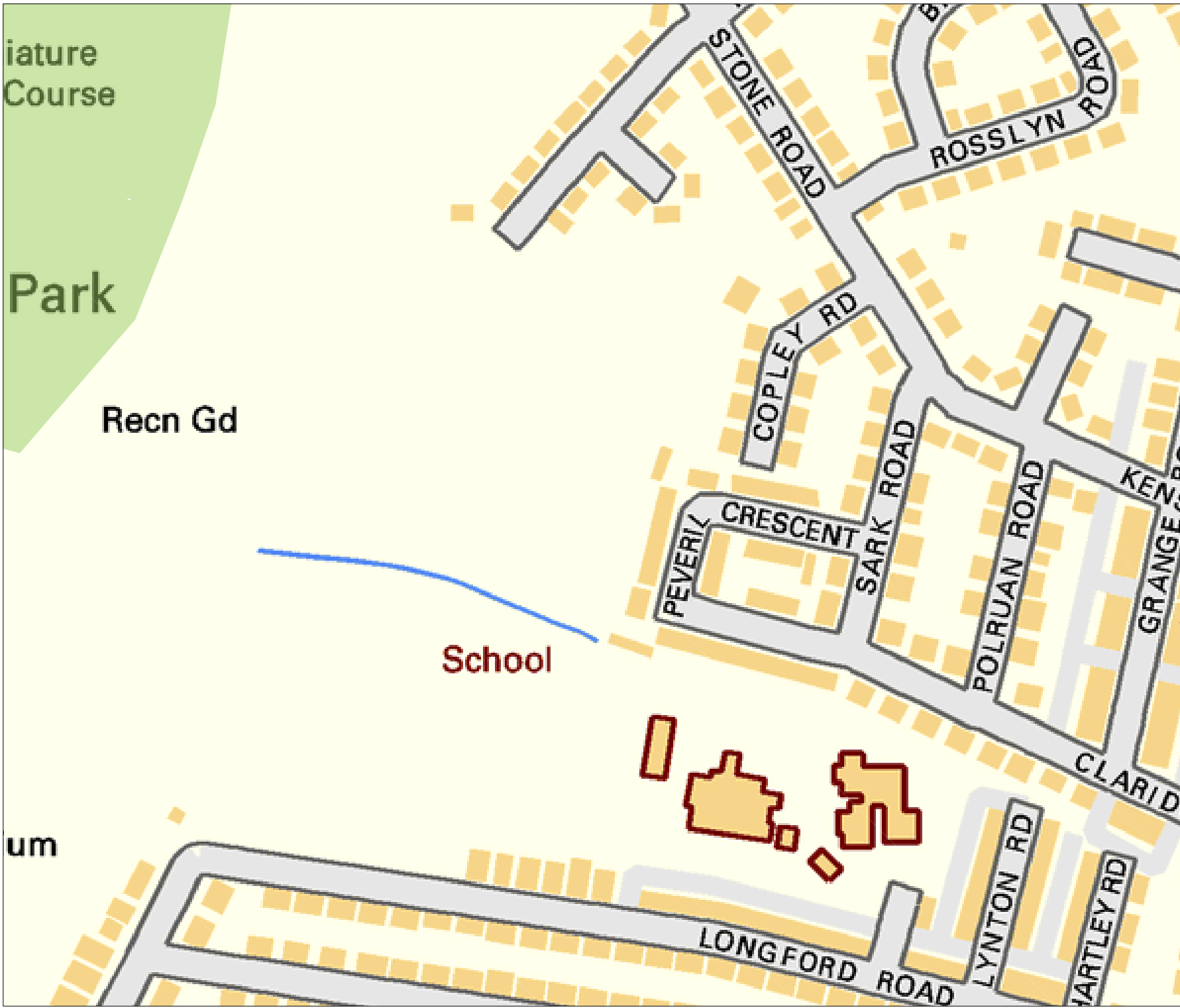
[CityFibre]<<https://www.cityfibre.com>>

[Follow CityFibre on LinkedIn]<<https://www.cityfibre.com>> [Follow CityFibre on LinkedIn]
<<https://www.linkedin.com/company/cityfibre>> [Follow CityFibre on Twitter] <<https://www.twitter.com/CityFibre>>

Disclaimer:

CityFibre Limited is incorporated in England (No. 09759465) and its registered office is 15 Bedford Street, London WC2E 9HE. This email, together with any attachments, is confidential and for use by the addressee(s) only. If you are not the intended recipient, please notify the sender immediately, delete the message from your system and do not copy, use, distribute or disclose the email, its contents or attachments for any purpose. CityFibre Ltd accepts no liability for damage caused to a recipient's system by this email nor for any unauthorised access to or interference with this email.

[Subscribe to CityFibre on YouTube]Please consider the environment - do you really need to print this email?



bitmap_layout select_raster

LEGEND

- EXISTING PLANT
- EXISTING PLANT

bitmap_layout select_raster

| | |
|--|---|
| <p>Head Office CityFibre Holdings Ltd 15 Bedford Street, London, WC2E 9HE</p> <p>Tel: 0845 293 0774 Web: www.cityfibre.com</p> | <p>Asset Office CityFibre Holdings Ltd, Rutherford House, Birchwood, Warrington, WA3 6ZH</p> <p>Email: asset.team@cityfibre.com</p> |
|--|---|

Disclaimer:

Information shown on this plan is for general guidance only. No warranty is made as to its accuracy. This plan must not be solely relied upon in the event of excavation or other works being carried out in the vicinity of Cityfibre plant. No liability of any kind is accepted by Cityfibre, its agents or servants for any error, omission, discrepancy or deviation. This information is valid for the date printed.

Project
Plant Enquiry

Drawing
Existing Plant

Drawn by:
smallworld Date: 24/02/2020

Drawing No. Revision
CFH_EP_000001 001

Scale: 1:2500 A4

Dave Ibbotson

From: Plantenquiries <plantenquiries@catelecomuk.com>
Sent: 08 February 2020 11:56
To: 'Dave Ibbotson'
Subject: RE: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Please Note: Our search criteria has changed. We previously searched for Colt Network which was within 200 metres, this has now changed to 50 metres. The negative response will be for all enquiries that the network is 50 metres or more away from the place of enquiry.

Dear Sir/Madam,

Thank you for your enquiry for the above reference.

We can confirm that Colt Technology Services do not have apparatus near the above location as presented on your submitted plan, if any development or scheme amendments fall outside the 50 metre perimeter new plans must be submitted for review.

Search is based on Overseeing Organisation Agent data supplied; we do not accept responsibility for O.O. Agent inaccurate data.

If we can be of any further assistance please do not hesitate to contact us.

Kind regards,

Plant Enquiry Team



Please consider the environment before printing this email.

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the intended recipient(s). If you are not the intended recipient, you must not copy, distribute or take any action based on this communication. If you have received this communication in error please contact plantenquiries@catelecomuk.com and delete this communication and any copies of it. Any views or opinions presented are solely those of the author and do not necessarily represent those of C A Telecom LTD. C A Telecom LTD monitors e-mails to ensure that its systems operate effectively and to minimise the risk of viruses.

From: Dave Ibbotson <dave.ibbotson@fuelsolutions.co.uk>
Sent: 30 January 2020 17:28
To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; plantenquiries@instalcom.co.uk; interroute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk;

telenttelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk; Pflanzenquiries <pflanzenquiries@catelecomuk.com>; plantenquiries@energetics-uk.com; OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com; assetrecords@utilityassets.co.uk; info@hiberniannetworks.com; nrswa@cofely-gdfsuez.com; plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; kpn.plantenquiries@instalcom.co.uk; sota.plantenquiries@instalcom.co.uk; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com

Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir / Madam

**Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453**

**Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022**

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

Dave Ibbotson

From: assetrecords@utilityassets.co.uk
Sent: 30 January 2020 17:20
To: dave.ibbotson@fuelsolutions.co.uk
Subject: Re: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Thank you for recently contacting Utility Assets plant record department. We will check whether we have any plant present at your site and contact you within 5 - 7 working days ONLY if we own any plant in the vicinity.

If we do not reply, we do not have any apparatus in the area of your works. However, PLEASE TAKE CARE when excavating around electricity cables in the event that not all cables present may be accurately shown. We recommend you use detecting equipment to map the site before excavating and fully comply with HSG47. DO NOT assume that a cable is dead if you don't have a record of its presence. The cable must be treated as live unless PROVEN DEAD by the cable owner. In case of emergency please contact your local electricity distribution company.

This is an automated reply from our dedicated asset records email address. If you receive further correspondence from us it will be from asset.manager@utilityassets.co.uk quoting a site reference number.

Asset Manager - Utility Assets Ltd

Dave Ibbotson

From: nrswa.uk@engie.com
Sent: 05 February 2020 10:24
To: dave.ibbotson@fuelsolutions.co.uk
Subject: RE: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

To whom it may concern

With regard to your request for details of existing services in the specified area;

We can confirm that, based on the details provided to us, we have no buried plant or equipment in the identified area.

Kind regards

Engie
Urban Energy
UK & Ireland
Kings Yard
5 Clarnico Lane
Queen Elizabeth Park
London E15 2HG

Tel. +44 (0) 208 221 6530
Mob. +44

ENGIE



engie.co.uk

Kings Yard,
1 Waterden Road,
Queen Elizabeth Olympic Park
London E15 2GP - UK

Please consider the environment before printing this message

A horizontal bar with a rainbow color gradient from blue on the left to red on the right.

From: Dave Ibbotson <dave.ibbotson@fuelsolutions.co.uk>

Sent: 30 January 2020 17:28

To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; plantenquiries@instalcom.co.uk; interoute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk; telenttelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk; plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com; OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com; assetrecords@utilityassets.co.uk; info@hibernianetworks.com; NRSWA (ENGIE UK) <nrswa.uk@engie.com>; plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; kpn.plantenquiries@instalcom.co.uk; sota.plantenquiries@instalcom.co.uk; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com

Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir / Madam

Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453

Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

ENGIE Mail Disclaimer: <http://www.engie.com/disclaimer/>

Dave Ibbotson

From: plantenquiries@psgservices.co.uk
Sent: 31 January 2020 09:29
To: 'Dave Ibbotson'
Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

To Whom It May Concern:

Thank you for your recent enquiry regarding your proposed work at the above location.

euNetworks Fiber UK Limited do not have plant in the vicinity of your proposed works and no strategic additions to our existing network are envisaged in the immediate future.

This information is only valid for a period of 3 months so, if your start date is 3 months or more from the date of this email, please re-apply for updated information at our generic email address: plantenquiries@psgservices.co.uk.

Kind regards

ALL PLANT ENQUIRIES AND DIVERSIONARY REQUESTS SHOULD BE ADDRESSED BY EMAIL TO THE OPERATIONS TEAM AT plantenquiries@psgservices.co.uk , WITH A PLAN AND FULL POSTAL ADDRESS OF YOUR ENQUIRY, THANK YOU



For and on behalf of euNetwork Fiber UK Limited

Thanks

Vivien Hart

T 01772 514453 | **E** plantenquiries@psgservices.co.uk



Telecommunications Survey, Planning, Engineering & GIS Services

Information contained in this e-mail and any files or documents transmitted with it are confidential. They are solely for the use of the individual or entity to whom they are addressed and contain legally privileged information. You must not copy, reproduce, print, forward or disclose their contents to any other person. If you are not the intended recipient, please notify the sender immediately and delete from your computer. Any views or opinions presented are solely those of the author and do not necessarily represent those of PSG Services Ltd.

Although this e-mail and any attachments are believed to be free of any virus or other defects which might affect any computer or IT systems into which they are received, no responsibility is accepted by PSG Services Limited for any loss or damage arising in any way from the receipt or use thereof.

=====

Dave Ibbotson

From: KPN Plant Enquiries <kpn.plantenquiries@instalcom.co.uk>
Sent: 06 February 2020 10:58
To: 'Dave Ibbotson'
Subject: RE: K02-20- 0735 Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453



Dear Sir or Madam,

With reference to your plant enquiry below, we can confirm that KPN do not have any apparatus within the immediate proximity of your proposed works.

If you require any further information, please do not hesitate to contact us.

Please note that this response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence.

Regards

Plant Enquiries Dept
Instalcom Limited
Borehamwood Ind. Park
Rowley Lane
Borehamwood
WD6 5PZ

Office: +44 (0)208 731 4613
Fax: +44 (0)208 731 4601
Email: kpn.plantenquiries@instalcom.co.uk
Web: <http://www.instalcom.co.uk>



From: Dave Ibbotson [mailto:dave.ibbotson@fuelsolutions.co.uk]
Sent: 30 January 2020 17:28
To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; Plantenquiries <Plantenquiries@instalcom.co.uk>; interoute.enquiries@plancast.co.uk;

generalenquiries@serco.com; nrswa@sky.uk; telenttelia.plantenquiries@telent.com;
plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk;
plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com;
OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com;
assetrecords@utilityassets.co.uk; info@hibernianetworks.com; nrswa@cofely-gdfsuez.com;
plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; KPN
Plant Enquiries <kpn.plantenquiries@instalcom.co.uk>; SOTA Plant Enquiries
<SOTA.PlantEnquiries@instalcom.co.uk>; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com
Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E
380918 N 394453

Dear Sir / Madam

**Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453**

**Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022**

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorised to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

Dave Ibbotson

From: Plant Enquiries <plantenquiries@lastmile-uk.com>
Sent: 31 January 2020 07:08
To: Dave Ibbotson
Subject: RE: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir/Madam,

Thank you for submitting your recent plant enquiry.

Based on the information provided, I can confirm that Last Mile **does not** have any plant within the area(s) specified in your request.

If you require further assistance with outstanding enquiries, please call 03300 587 443.

Please ensure all plant enquiries are sent to plantenquiries@lastmile-uk.com

Regards

From: Dave Ibbotson <dave.ibbotson@fuelsolutions.co.uk>
Sent: 30 January 2020 17:28
To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; plantenquiries@instalcom.co.uk; interoute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk; telenttelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk; plantenquiries@catelecomuk.com; Plant Enquiries <plantenquiries@lastmile-uk.com>; OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com; assetrecords@utilityassets.co.uk; info@hiberniannetworks.com; nrswa@cofely-gdfsuez.com; plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; kpn.plantenquiries@instalcom.co.uk; sota.plantenquiries@instalcom.co.uk; mbnlplantenquiries@turntown.com; Plant Enquiries <plantenquiries@lastmile-uk.com>
Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir / Madam

**Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453**

**Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022**

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in

the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

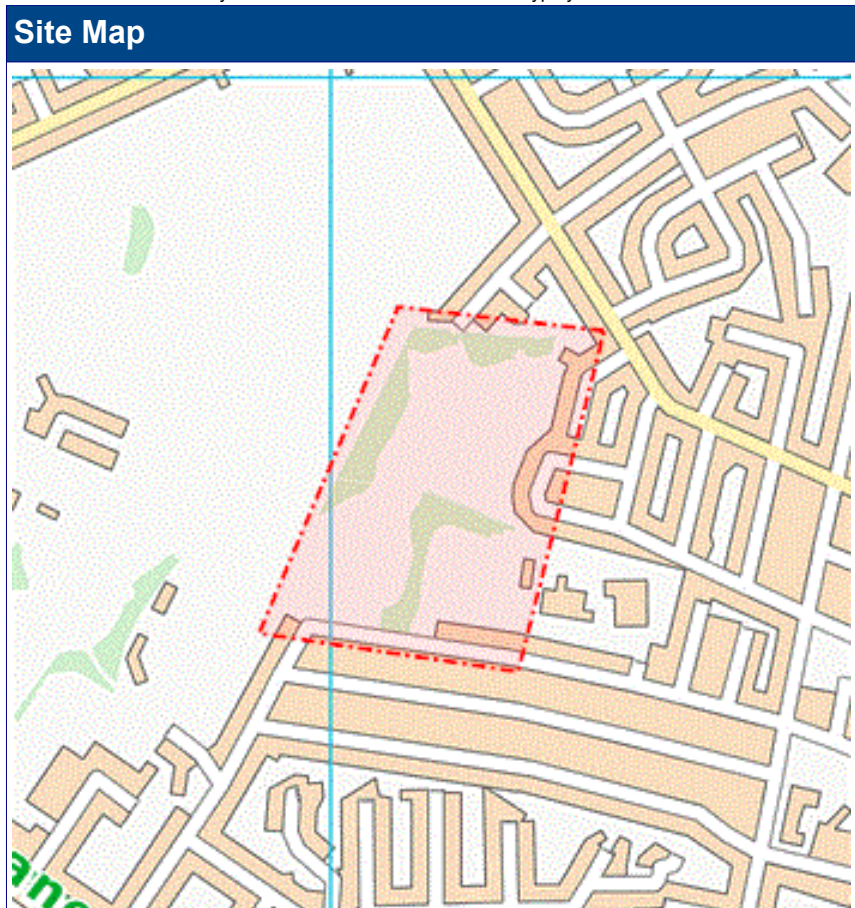
dave.ibbotson@fuelsolutions.co.uk

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

| Enquirer | | | |
|----------|---|--------|-------------|
| Name | Mr David Ibbotson | Phone | 01785249287 |
| Company | Fuel Solutions (UK) Limited | Mobile | 07944029982 |
| Address | Parkfield Business Centre Park Street Stafford Staffordshire ST17 4AL | | |
| Email | dave.ibbotson@fuelsolutions.co.uk | | |

| Enquiry Details | | | |
|----------------------|-------------------------|-------------------|----------------------|
| Scheme/Reference | Ryebank Fields | | |
| Enquiry type | Initial Enquiry | Work category | Development Projects |
| Start date | 01/01/2021 | Work type | Housing |
| End date | 01/11/2021 | Site size | 88135 metres square |
| Searched location | XY= 380976, 394436 | Work type buffer* | 25 metres |
| Confirmed location | 381118 394581 | | |
| Site Contact Name | David Ibbotson | Site Phone No | 07944029982 |
| Description of Works | New Housing Development | | |

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.



Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.linesearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Notes. Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineSearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. **LSBUD Members who have assets registered within your search area. ("Affected")**
 - a. **These LSBUD Members will either:**
 - i. **Ask for further information ("Email Additional Info" noted in status).** The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. **Respond directly to you ("Await Response").** In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. **LSBUD Members who do not have assets registered within your search area. ("Not Affected")**
3. **Non LSBUD Members who may have assets within your search area.** Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

| Asset Owner | Phone/Email | Emergency Only | Status |
|--|-------------|---|----------------|
| Electricity North West Limited | 08001954141 | 08001954141 | Await response |
| National Grid Gas (Above 7 bar), National Grid Gas Distribution Limited (Above 2 bar) and National Grid Electricity Transmission | 0800688588 | Gas 0800111999 Electricity 0800404090 | Await response |

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

| | | |
|---|--|--|
| AWE Pipeline | Balfour Beatty Investments Limited | BOC Limited (A Member of the Linde Group) |
| BP Exploration Operating Company Limited | BPA | Carrington Gas Pipeline |
| CATS Pipeline c/o Wood Group PSN | Cemex | Centrica Storage Ltd |
| Chrysaor Production (UK) Limited | CLH Pipeline System Ltd | CNG Services Ltd |
| Concept Solutions People Ltd | ConocoPhillips (UK) Teesside Operator Ltd | DIO (MOD Abandoned Pipelines) |
| Drax Group | E.ON UK CHP Limited | EirGrid |
| ENI & Himor c/o Penspen Ltd | EnQuest NNS Limited | EP Langage Limited |
| ESP Utilities Group | ESSAR | Esso Petroleum Company Limited |
| Fulcrum Pipelines Limited | Gamma | Gateshead Energy Company |
| Gigaclear Ltd | Gtt | Hafren Dyfrdwy |
| Heathrow Airport LTD | Humbly Grove Energy | IGas Energy |
| INEOS FPS Pipelines | INEOS Manufacturing (Scotland and TSEP) | INOVYN Enterprises Limited |
| Intergen (Coryton Energy or Spalding Energy) | Mainline Pipelines Limited | Manchester Jetline Limited |
| Manx Cable Company | Marchwood Power Ltd (Gas Pipeline) | Melbourn Solar Limited |
| Murphy Utility Assets | Northumbrian Water Group | NPower CHP Pipelines |
| Oikos Storage Limited | Ørsted | Perenco UK Limited (Purbeck Southampton Pipeline) |
| Perenco UK Limited (Purbeck Southampton Pipeline) | Petroineos | Phillips 66 |
| Premier Transmission Ltd (SNIP) | Redundant Pipelines - LPDA | RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station) |
| RWEnpower (Little Barford and South Haven) | SABIC UK Petrochemicals | Scottish and Southern Electricity Networks |
| Scottish Power Generation | Seabank Power Ltd | SES Water |
| Severn Trent (Chester area only) | SGN | Shell (St Fergus to Mossmorran) |
| Shell Pipelines | SSE (Peterhead Power Station) | SSE Enterprise Telecoms |
| SSE Utility Solutions Limited | Tata Communications (c/o JSM Construction Ltd) | Total (Colnbrook & Colwick Pipelines) |
| Total Finaline Pipelines | Transmission Capital | UK Power Networks |
| Uniper UK Ltd | Vattenfall | Veolia ES SELCHP Limited |
| Veolia ES Sheffield Ltd | Wales and West Utilities | Western Power Distribution |

The following Non-LSBUD Members may have assets in your search area. It is YOUR RESPONSIBILITY to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

| Non-LSBUD members (Asset owners not registered on LSBUD) | | | |
|--|---|---------------|--------------|
| Asset Owner | Preferred contact method | Phone | Status |
| BT | https://www.swns.bt.com/pls/mbe/welcome.home | 08009173993 | Not Notified |
| Cadent Gas | plantprotection@cadentgas.com | 0800688588 | Not Notified |
| CenturyLink Communications UK Limited | plantenquiries@instalcom.co.uk | 02087314613 | Not Notified |
| CityFibre | asset.team@cityfibre.com | 033 3150 7282 | Not Notified |
| Colt | plantenquiries@catelecomuk.com | 01227768427 | Not Notified |
| Energetics Electricity | plantenquiries@lastmile-uk.com | 01698404646 | Not Notified |
| ENGIE | nrswa@cofely-gdfsuez.com | 01293 549944 | Not Notified |
| GTC | https://pe.gtc-uk.co.uk/PlantEnqMembership | 01359240363 | Not Notified |
| KPN (c-/Instalcom) | kpn.plantenquiries@instalcom.co.uk | n/a | Not Notified |
| Manchester City Council | medc@manchester.gov.uk | 01614552250 | Not Notified |
| Mobile Broadband Network Limited | mbnlplantenquiries@turntown.com | 01212 621 100 | Not Notified |
| Sky UK Limited | nrswa@sky.uk | 02070323234 | Not Notified |
| Sota | SOTA.plantenquiries@instalcom.co.uk | | Not Notified |
| Teliasonera | telentelia.plantenquiries@telent.com | 0800526015 | Not Notified |
| United Utilities | WastewaterDeveloperServices@uuplc.co.uk | 08707510101 | Not Notified |
| Utility assets Ltd | assetrecords@utilityassets.co.uk | | Not Notified |
| Verizon Business | osp-team@uk.verizonbusiness.com | 01293611736 | Not Notified |
| Virgin Media | http://www.digdat.co.uk | 08708883116 | Not Notified |
| Vodafone | osm.enquiries@atkinsglobal.com | 01454662881 | Not Notified |

Disclaimer

Please refer to LineSearchbeforeUdig's Terms of Use for full terms of use available at www.lineSearchbeforeUdig.co.uk

The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LineSearchbeforeUdig will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LineSearchbeforeUdig, including but not exclusively those set out above. Therefore, LineSearchbeforeUdig cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LineSearchbeforeUdig and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.

Dave Ibbotson

From: MBNLplantenquiries <mbnl.plant.enquiries@turntown.com>
Sent: 31 January 2020 10:16
To: Dave Ibbotson
Subject: RE: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir/Madam

Turner & Townsend Project Management are appointed on behalf of MBNL to conduct Plant (apparatus) Searches in accordance with the relevant NRSWA Act 1991- Diversionary Works legislation. These searches considered plant belonging to EE (T-Mobile and Orange sites) and the HG3 mobile telecommunication networks.

MBNL do not have any plant that would be affected by the proposed work. Should you have any further queries please use the contact details below.

Thank you,

Kind regards,

MBNL SHQE Team

t: 0121 262 3663 |



Health & Safety Team of the Year 2019

Turner & Townsend Europe Limited

Registered office: Low Hall, Calverley Lane, Horsforth, Leeds LS18 4GH, United Kingdom | Registered in England and Wales | Registration No: 3514794

From: Dave Ibbotson [mailto:dave.ibbotson@fuelsolutions.co.uk]

Sent: 30 January 2020 17:28

To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; plantenquiries@instalcom.co.uk; interoute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk; telenttelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk; plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com; OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com; assetrecords@utilityassets.co.uk; info@hibernianetworks.com; nrswa@cofely-gdfsuez.com; plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; kpn.plantenquiries@instalcom.co.uk; sota.plantenquiries@instalcom.co.uk; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com

Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir / Madam

Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453

Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

For further information and registration details visit our website <http://www.turnerandtownsend.com>

This email and any attachments ("the email") is confidential and may also be privileged, is subject to copyright and may be read, copied and used only by the intended recipient. The recipient is responsible for virus checking this email. If you are not the intended recipient please immediately notify us, delete and do not use, disclose, distribute, copy, print or rely on this email or any part of it. Turner & Townsend does not accept any liability for any loss or damage from your receipt or use of this email.

Please consider the environment before printing this email.

Dave Ibbotson

From: McKenna Thomas <Thomas.McKenna@networkrail.co.uk> on behalf of OP Buried Services Enquiries <OPBuriedServicesEnquiries@networkrail.co.uk>
Sent: 31 January 2020 12:05
To: Dave Ibbotson
Subject: RE: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir/Madam,

With regards to your enquiry, Network Rail does not believe there is any Network Rail owned apparatus or underground services within the area you have defined. As there is always the possibility that new works could be planned and undertaken in this area by Network Rail this information is valid as at today's date and is supplied for general guidance only.

Please be aware that this response is based on Network Rail's records and knowledge and no guarantee can be given regarding accuracy or completeness. CAT scans, safe digging practices (as contained in HSE publications) and other appropriate investigative techniques should always be carried out.

There may be other apparatus or underground services owned or operated by Utility Companies and accordingly you should contact individual utilities for information.

If, in connection with your investigations and/or work, you become aware of Network Rail apparatus or underground services within your area of work, please ensure these are notified to our Asset Protection team via the following link as a matter of urgency so that appropriate measures for avoidance of risk and damage can be put in place.

Contact details can be found in the following link: [Network Rail Asset Protection Teams](#)

If you require any further clarification on any of the information please contact opburiedservicesenquiries@networkrail.co.uk.

Regards,

Thomas McKenna
Distribution Administrator



Worksite Survey | Asset Information Services
National Records Centre | Audax Road | York YO30 4US
E: thomas.mckenna@networkrail.co.uk
W: www.networkrail.co.uk

At Network Rail we work flexibly – so whilst it suits me to email now, I do not expect a response or action outside of your own working hours

From: Dave Ibbotson <dave.ibbotson@fuelsolutions.co.uk>

Sent: 30 January 2020 17:28

To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; plantenquiries@instalcom.co.uk; interoute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk; telenttelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk; plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com; OP Buried Services Enquiries <OPBuriedServicesEnquiries@networkrail.co.uk>; plant-enquiries@redcentricplc.com; assetrecords@utilityassets.co.uk; info@hibernianetworks.com; nrswa@cofely-gdfsuez.com; plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; kpn.plantenquiries@instalcom.co.uk; sota.plantenquiries@instalcom.co.uk; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com

Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir / Madam

**Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453**

**Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022**

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
 Fuel Solutions UK Limited
 Parkfield Business Centre
 Park Street
 Stafford, ST17 4AL
 t: 01785 249287
 m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

The content of this email (and any attachment) is confidential. It may also be legally privileged or otherwise protected from disclosure.

This email should not be used by anyone who is not an original intended recipient, nor may it be copied or disclosed to anyone who is not an original intended recipient.

If you have received this email by mistake please notify us by emailing the sender, and then delete the email and any copies from your system.

Liability cannot be accepted for statements made which are clearly the sender's own and not made on behalf of Network Rail.

Network Rail Infrastructure Limited registered in England and Wales No. 2904587, registered office Network Rail, 2nd Floor, One Eversholt Street, London, NW1 2DN

Dave Ibbotson

From: NRSWA <nrswa.nrswa@sky.uk>
Sent: 31 January 2020 10:20
To: dave.ibbotson@fuelsolutions.co.uk
Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453



Thank you for your enquiry.

Please be advised that Sky Telecommunications Services Ltd will not be affected by your proposal.

Best endeavours have been made to ensure accuracy, however if you require further information, please contact us by email at nrswa@sky.uk.

Regards

NRSWA Department
Tech UK - Implementation

sky | TECHNOLOGY

✉ nrswa@sky.uk ☎ +44 20703232234

From: Dave Ibbotson <dave.ibbotson@fuelsolutions.co.uk>
Sent: 30 January 2020 17:28
To: osm.enquiries@atkinglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; plantenquiries@instalcom.co.uk; interroute.enquiries@plancast.co.uk; generalenquiries@serco.com; NRSWA <nrswa.nrswa@sky.uk>; telenttelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk; plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com; OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com; assetrecords@utilityassets.co.uk; info@hibernianetworks.com; nrswa@cofely-gdfsuez.com; plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; kpn.plantenquiries@instalcom.co.uk; sota.plantenquiries@instalcom.co.uk; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com
Subject: [EXTERNAL] Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir / Madam

Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ

O.S. Grid Ref E 380918 N 394453

Description of Works : Proposed domestic dwelling development

Expected start Date : November 2020

Expected Completion Date : February 2022

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

Information in this email including any attachments may be privileged, confidential and is intended exclusively for the addressee. The views expressed may not be official policy, but the personal views of the originator. If you have received it in error, please notify the sender by return e-mail and delete it from your system. You should not reproduce, distribute, store, retransmit, use or disclose its contents to anyone. Please note we reserve the right to monitor all e-mail communication through our internal and external networks. SKY and the SKY marks are trademarks of Sky Limited and Sky International AG and are used under licence.

Sky UK Limited (Registration No. 2906991), Sky-In-Home Service Limited (Registration No. 2067075), Sky Subscribers Services Limited (Registration No. 2340150) and Sky CP Limited (Registration No. 9513259) are direct or indirect subsidiaries of Sky Limited (Registration No. 2247735). All of the companies mentioned in this paragraph are incorporated in England and Wales and share the same registered office at Grant Way, Isleworth, Middlesex TW7 5QD

Dave Ibbotson

From: SOTA Plant Enquiries <SOTA.PlantEnquiries@instalcom.co.uk>
Sent: 06 February 2020 16:08
To: 'Dave Ibbotson'
Subject: RE: S02-20- 0297 Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453



Dear Sir or Madam,

With reference to your plant enquiry below, we can confirm that SOTA do not have any apparatus within the immediate proximity of your proposed works.

If you require any further information, please do not hesitate to contact us.

Please note that this response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence.

Regards

Plant Enquiries Dept.
Instalcom Limited
Borehamwood Ind. Park
Rowley Lane
Borehamwood
WD6 5PZ

Office: +44 (0)208 731 4613
Fax: +44 (0)208 731 4601
Email: sota.plantenquiries@instalcom.co.uk
Web: <http://www.instalcom.co.uk>



From: Dave Ibbotson [mailto:dave.ibbotson@fuelsolutions.co.uk]

Sent: 30 January 2020 17:28

To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; Plantenquiries <Plantenquiries@instalcom.co.uk>; interoute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk; telentelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk;

plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com;
OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com;
assetrecords@utilityassets.co.uk; info@hibernianetworks.com; nrswa@cofely-gdfsuez.com;
plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; KPN
Plant Enquiries <kpn.plantenquiries@instalcom.co.uk>; SOTA Plant Enquiries
<SOTA.PlantEnquiries@instalcom.co.uk>; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com
Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E
380918 N 394453

Dear Sir / Madam

**Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453**

**Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022**

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorised to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

Contact

Telia Carrier
Data Quality Office
+36 1 808 9955
check-network@teliacompany.com

Your reference: Ryebank Road, Chorlton-Cum-Hardy M21 9LJ

Our reference: UK_ROW_77_SA_30012020

Dear Sir/Madam

Responding to your Line Plant Enquiry to telenttelia.plantenquiries@telent.com we would like to inform you that Telia Carrier's network is not in vicinity of the location which was detailed in your enquiry. The entire Telia network in the UK is shown below.

Our team is seeking opportunity to cooperate with Enquirers whose enquiries are targeting locations far away from our network. Our intention is to reduce the number of out-of-area requests and save time and manpower on both side. If you can utilize our network KMZ map to see where our network is located and to pre-filter the enquiries which are far from our network, please contact us at check-network@teliacompany.com and we will provide you a KMZ network map.

**Company Information**

Telia Carrier UK Ltd.
Registered office 95 Cromwell Road, London, SW7 4DL, United Kingdom
Reg no. 2796345
VAT no. GB 628419621

Contact information

Telia Carrier UK Ltd.
Postal & Visiting Address: 4th Floor, 95 Cromwell Road London SW7 4DL
United Kingdom
Tel +44-778 999 4089
teliacarrier.com

Public

Date
2020-01-31

Page
2 (2)

Please note that all enquiries relating to the Telia Carrier line plant should be forwarded to:

By post – to, TELENT
 Telia Carrier line plant enquiries,
 Mayne House,
 Fenton Way,
 Basildon,
 Essex,
 SS15 6TD

By email – to, telenttelia.plantenquiries@telent.com

By phone – to, 01268 269096

Your sincerely

Andrea Sztecenko

GIS Officer

check-network@teliacompany.com

Telia Carrier Data Quality Office



Dave Ibbotson

From: TM Plant Enquiries <plantenquiries@trafficmaster.co.uk>
Sent: 02 February 2020 11:48
To: Dave Ibbotson
Subject: Re: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Our ref: Damian Sweeney TEL: 01234759112 or 07712129249

New Roads and Street Works Act 1991- Sections 83, 84,142 and 143 Codes of Practice Appendix C2

In response to your notice regarding works which you, are proposing to undertake.

I can confirm that *Trafficmaster* does not have equipment installed within the boundary of the works.

If you have any further queries regarding this or any other programme, please do not hesitate to contact me on my details below.

Yours sincerely
For & on Behalf of
Trafficmaster Ltd

Infrastructure Maintenance

plantenquiries@trafficmaster.co.uk

From: Dave Ibbotson <dave.ibbotson@fuelsolutions.co.uk>
Sent: Thursday, January 30, 2020 5:28 PM
To: osm.enquiries@atkinglobal.com <osm.enquiries@atkinglobal.com>; plantenquiries@mcnicholas.co.uk <plantenquiries@mcnicholas.co.uk>; plantenquiries@fibrespan.com <plantenquiries@fibrespan.com>; plantenquiries@instalcom.co.uk <plantenquiries@instalcom.co.uk>; interoute.enquiries@plancast.co.uk <interoute.enquiries@plancast.co.uk>; generalenquiries@serco.com <generalenquiries@serco.com>; nrswa@sky.uk <nrswa@sky.uk>; telenttelia.plantenquiries@telent.com <telenttelia.plantenquiries@telent.com>; TM Plant Enquiries <plantenquiries@trafficmaster.co.uk>; osp-team@uk.verizonbusiness.com <osp-team@uk.verizonbusiness.com>; plant.enquiries.team@virginmedia.co.uk <plant.enquiries.team@virginmedia.co.uk>; plantenquiries@catelecomuk.com <plantenquiries@catelecomuk.com>; plantenquiries@energetics-uk.com <plantenquiries@energetics-uk.com>; OPburiedservicesenquiries@networkrail.co.uk <OPburiedservicesenquiries@networkrail.co.uk>; plant-enquiries@redcentricplc.com <plant-enquiries@redcentricplc.com>; assetrecords@utilityassets.co.uk <assetrecords@utilityassets.co.uk>; info@hiberniannetworks.com <info@hiberniannetworks.com>; nrswa@cofely-gdfsuez.com <nrswa@cofely-gdfsuez.com>; plantandequipenquiries@ctil.co.uk <plantandequipenquiries@ctil.co.uk>; plantenquiries@psgservices.co.uk <plantenquiries@psgservices.co.uk>; TM Plant Enquiries <plantenquiries@trafficmaster.co.uk>; kpn.plantenquiries@instalcom.co.uk <kpn.plantenquiries@instalcom.co.uk>; sota.plantenquiries@instalcom.co.uk <sota.plantenquiries@instalcom.co.uk>; mbnlplantenquiries@turntown.com <mbnlplantenquiries@turntown.com>; plantenquiries@lastmile-uk.com <plantenquiries@lastmile-uk.com>
Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

CAUTION: This email originated from outside the company.

Dear Sir / Madam

Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ

O.S. Grid Ref E 380918 N 394453

Description of Works : Proposed domestic dwelling development

Expected start Date : November 2020

Expected Completion Date : February 2022

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre

Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

Dave Ibbotson

From: UK OSP-Team <osp-team@uk.verizon.com>
Sent: 31 January 2020 12:44
To: Dave Ibbotson
Cc: UK OSP-Team
Subject: RE: [E] Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir/Madam

Verizon is a licensed Statutory Undertaker.

We have reviewed your plans and have determined that Verizon (Formally known as MCI WorldCom, MFS) has no apparatus in the areas concerned.

If you have any further queries please do not hesitate to get in touch.

Yours faithfully

Plant Protection Officer E.mail osp-team@uk.verizon.com

From: Dave Ibbotson [mailto:dave.ibbotson@fuelsolutions.co.uk]
Sent: 30 January, 2020 5:28 PM
To: osm.enquiries@atkinsglobal.com; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; plantenquiries@instalcom.co.uk; interoute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk; telenttelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; UK OSP-Team; plant.enquiries.team@virginmedia.co.uk; plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com; OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com; assetrecords@utilityassets.co.uk; info@hibernianetworks.com; nrswa@cofely-gdfsuez.com; plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; kpn.plantenquiries@instalcom.co.uk; sota.plantenquiries@instalcom.co.uk; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com
Subject: [E] Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir / Madam

Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453

Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

Verizon UK Limited - registered in England & Wales - registered number 2776038 - registered office at Reading International Business Park, Basingstoke Road, Reading, Berkshire, UK RG2 6DA - VAT number 823 8170 33



Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford
ST17 4AL

Virgin Media
Field Services
Units 1-12
Broad Lane
Mayfair Business Park
Bradford
Yorkshire
BD4 8PW

Tel: 0870 888 3116 Opt 2

Plant Enquiry Ref: VM.1158156
Letter Date 30.01.2020
Your Ref: NA
Date: 31.01.2020

Dear Sir/Madam,

Enquiry Location: Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ

Thank you for your enquiry regarding work at the above location.
I enclose a copy of our above referenced drawing, marked to show the approximate position of plant owned and operated by Virgin Media.

You will be aware that you have a duty to ensure that no damage results to this equipment as a result of your proposed works. Please note that this apparatus may contain Fibre Optic, Coaxial and/or 240v Power Cables and as such, special care must be taken when excavating this area.

Should you require Virgin Media apparatus to be diverted we must agree a specification of works and provide a detailed estimate of costs. The costs are £720 (Business) or £240 (Residential) Inc VAT and the charge applies to each individual scheme requested. Both the estimate and specification will be sent to you within 25 working days of when the payment was received.

This initial payment will cover the following: -

- Detailed site visit by an experienced planning engineer.(Up to 10 hours planning time)
- Detailed specification of works.
- Detailed breakdown of costs.

Payment is required in advance for the estimated cost of detailed design work and the charge applies whether or not your works proceed. Please supply us with your payment and a copy of your plans or drawings and quote 'Our Ref' as above.

The address to send the cheque is:

Diversiory Works, Virgin Media, 1 Dove Wynd, Strathclyde Business Park Bellshill ML4 3AL

Or if you prefer to talk, please call the Diversiory Team on: 0800 408 0088 Option 1

Should your request be in relation to a Residential New Development, Virgin Media would like the opportunity to assist with your diversiory quote and serve your site free of charge, offering your customers the fastest widely available broadband speeds on the market up to 500Mbps.

For Commercial New Developments our team can also be reached through the below link, ensuring future businesses to your site are connected to our fibre network.

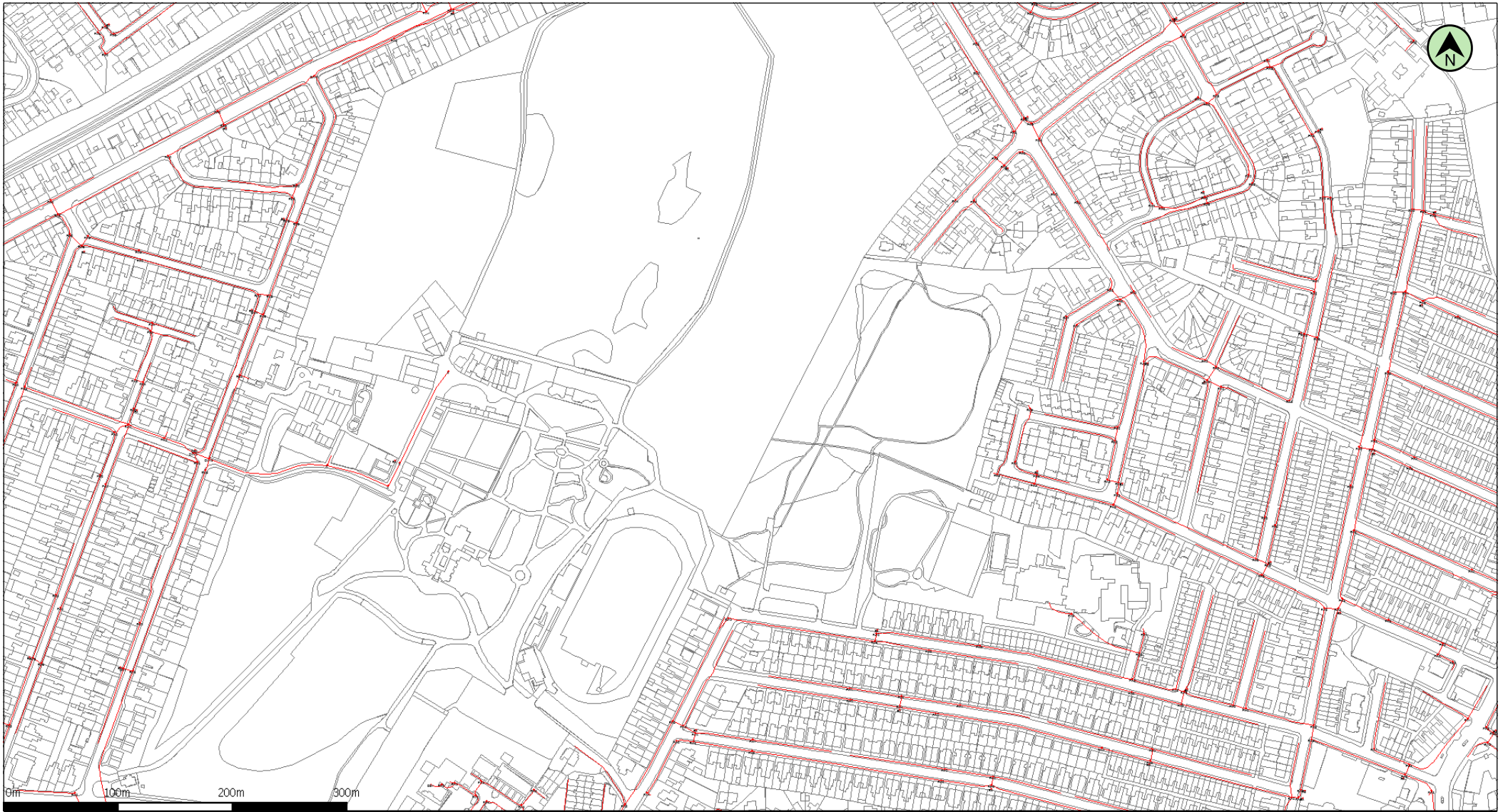
Simply head over to www.virginmedia.com/developer to fill in the enquiry form, and a member of our New Developments team will be in touch within 48 hours.

You will also find useful information about additional benefits to you and your site, plus a handy 'developers guide' can be downloaded with detailed installation requirements.

Or if you prefer to talk, please call the Diversiory Team on: 0800 408 0088 Option 2

Yours faithfully

National Plant Enquiries Team,



(c) Crown copyright and database rights 2020 Ordnance Survey 100019209

Date: 31/01/20

Scale: 1:4715

Map Centre: 380988,394610

Data updated: 01/11/19

Telecoms Plan A4

Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2020 Ordnance Survey 100019209.

Duct, Trench



Chamber



Cabinet



stephy.jaison@virginmedia.co.uk

VM.1158156



Dave Ibbotson

From: Badwannache, Sanjana <Sanjana.Badwannache@atkinsglobal.com>
Sent: 19 February 2020 09:33
To: Dave Ibbotson
Subject: RE: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Please accept this email as confirmation that Vodafone: Fixed **does not** have apparatus within the vicinity of your proposed works detailed below.

Many thanks.

Plant Enquiries Team
T: +44 (0)1454 662881
E: osm.enquiries@atkinsglobal.com

ATKINS working on behalf of Vodafone: Fixed



This response is made only in respect to electronic communications apparatus forming part of the Vodafone Limited electronic communications network formerly being part of the electronic communications networks of Cable & Wireless UK (now re-named Vodafone Enterprise UK), Energis Communications Limited, Thus Group Holdings Limited and Your Communications Limited.

PLEASE NOTE:

The information given is indicative only. No warranty is made as to its accuracy. This information must not be solely relied upon in the event of excavation or other works carried out in the vicinity of Vodafone plant. No liability of any kind whatsoever is accepted by Vodafone, its servants, or agents, for any error or omission in respect of information contained on this information. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to Vodafone's apparatus and all claims made against them by Third parties as a result of any interference or damage.

IMPORTANT - PLEASE READ:

Diversionary works may be necessary if the existing line of the highway/railway or its levels are altered, where apparatus is affected. Where apparatus is affected and requires diversion, you must submit draft details of the proposed scheme with a request for a 'C3 Budget Estimate' to c3requests@vodafone.com. These estimates should be provided by Vodafone normally within 20 working days from receipt of your request. Please include proof of this C2 response when requesting a C3 (using the 'forward' option).



Please consider the environment before printing this e-mail

From: Dave Ibbotson <dave.ibbotson@fuelsolutions.co.uk>
Sent: 30 January 2020 22:58
To: National Plant Enquiries <OSM.enquiries@atkinsglobal.com>; plantenquiries@mcnicholas.co.uk; plantenquiries@fibrespan.com; plantenquiries@instalcom.co.uk; interoute.enquiries@plancast.co.uk; generalenquiries@serco.com; nrswa@sky.uk; telenttelia.plantenquiries@telent.com; plantenquiries@trafficmaster.co.uk; osp-team@uk.verizonbusiness.com; plant.enquiries.team@virginmedia.co.uk; plantenquiries@catelecomuk.com; plantenquiries@energetics-uk.com; OPburiedservicesenquiries@networkrail.co.uk; plant-enquiries@redcentricplc.com; assetrecords@utilityassets.co.uk; info@hibernianetworks.com; nrswa@cofely-gdfsuez.com; plantandequipenquiries@ctil.co.uk; plantenquiries@psgservices.co.uk; plantenquiries@trafficmaster.co.uk; kpn.plantenquiries@instalcom.co.uk; sota.plantenquiries@instalcom.co.uk; mbnlplantenquiries@turntown.com; plantenquiries@lastmile-uk.com
Subject: Location of Works : Development Land off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ O.S. Grid Ref E 380918 N 394453

Dear Sir / Madam

Re : Location of Works : Development Land , off Ryebank Road, Chorlton-Cum-Hardy M21 9LJ
O.S. Grid Ref E 380918 N 394453

Description of Works : Proposed domestic dwelling development
Expected start Date : November 2020
Expected Completion Date : February 2022

In order that all reasonable precautions may be taken to avoid risk to health and safety through contact with any of existing apparatus during execution of the proposed works, please describe any apparatus that you are aware of in the vicinity of the development site and indicate as accurately as possible its position and depth in the locality of the above location.

The proposed works consist of forming two new entrances to the development site :

- 1) Access 1 – E 380918 N 394453 Off Ryebank Road / Longford Road, Chorlton-Cum-Hardy M21 9LJ
- 2) Access 2 - E 381082 N 394755 Off Ryebank Road, Old Trafford M16 0HR

and a domestic development within the red line boundary as shown within the area shown on the attached plan on which co-ordinate points have been marked.

Please return a plan to the above e-mail address, or provide this information in some other format, or confirm that relevant information previously provided or available on the internet is up to date.

In addition, please highlight any special problems that could arise in connection with your apparatus as a result of the proposed works, and any limitations on the quality of any information provided.

If you have no apparatus in the area of the proposed works, please can you send a confirmation of this by return.

Can you please provide us with electronic copies of your records and ascertain whether your equipment is affected by the proposed development and return to dave.ibbotson@fuelsolutions.co.uk

In the meantime if you require any further information please do not hesitate to contact me using the details below.

Attached :

- Development Area plan with co-ordinates.

Kind Regards

David Ibbotson
Fuel Solutions UK Limited
Parkfield Business Centre
Park Street
Stafford, ST17 4AL
t: 01785 249287
m: 07944 029982

dave.ibbotson@fuelsolutions.co.uk

This email and any attached files are confidential and copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. Unless otherwise expressly agreed in writing, nothing stated in this communication shall be legally binding. The ultimate parent company of the Atkins Group is SNC-Lavalin Group Inc. Registered in Québec, Canada No. 059041-0. Registered Office 455 boul. René-Lévesque Ouest, Montréal, Québec, Canada, H2Z 1Z3. A list of Atkins Group companies registered in the United Kingdom and locations around the world can be found at <http://www.atkinsglobal.com/site-services/group-company-registration-details>

Consider the environment. Please don't print this e-mail unless you really need to.

APPENDIX 3

Cadent IP Gas Response

Dave Ibbotson

From: Pochwala, Cezary <Cezary.Pochwala@balfourbeatty.com>
Sent: 13 February 2020 11:02
To: dave.ibbotson@fuelsolutions.co.uk
Cc: Leonard, Phillip
Subject: NWGD205653 Longford Road, Chorlton-cum-Hardy, Manchester, M21 9SR - C3 Letter
Attachments: C3 Letter NWGD205653 Longford Road.pdf; (NEW) GD-SP-SSW-22 Specification for safe working in the vicinity of Cadent assets.pdf; Excavating_Safely_Leaflet_Gas CADENT.pdf; NWGG205653 Plan.pdf

Dear Dave,

Please find attached my response to your C3 Estimate request for **NWGD205653 Longford Road, Chorlton-cum-Hardy, Manchester, M21 9SR.**

Also attached are Cadents' Excavating Safely leaflets which provide useful information for any excavation around live gas mains.

610mm PE IP main diversion, I would estimate it to be in the region of £500,000.00

The steps to get the firm quote for IP diversion are:

Feasibility study – upfront cost approx. £12,000.00

then

G17 stage Detailed Design to confirm diversion costs of the IP main – upfront cost approx. £30,000.00

Timescales for the design and Legals – IP main – minimum 12 months, we would need new proposed route for it etc.

Kind Regards

Cez

GDSP Design Officer | Balfour Beatty

E: cezary.pochwala@balfourbeatty.com

M: 07783148123

Chaddock Ln, Worsley, Tyldesley, Manchester, M28 1XW

www.balfourbeatty.com | [@balfourbeatty](https://www.instagram.com/balfourbeatty) | [LinkedIn](https://www.linkedin.com/company/balfourbeatty)

Balfour Beatty

Build to Last
Lean. Expert. Trusted. Safe.

This email may contain information which is confidential and is intended only for use of the recipient/s named above. If you are not an intended recipient, you are hereby notified that any copying, distribution, disclosure, reliance upon or other use of the contents of this email is strictly prohibited. If you have received this email in error, please notify the sender and destroy it. 'Think before you print - please do not print this email unless you really need to' Balfour Beatty plc is registered in England as a public limited company; Registered No: 395826; Registered Office: 5 Churchill Place, Canary Wharf, London E14 5HU Warning: Although the company has taken reasonable precautions to ensure no viruses or other malware are present

Specification for safe working in the vicinity of Cadent assets - requirements for third parties



Cadent contact details



Disclaimer

This document is provided for use by third parties for safe working in the vicinity of Cadent assets. Where this document is used by any other party it is the responsibility of that party to ensure that this document is correctly applied.

Mandatory and non-mandatory requirements

In this document:

shall: indicates a mandatory requirement.

should: indicates best practice and is the preferred option.

If an alternative method is used then a suitable and sufficient risk assessment shall be completed to show that the alternative method delivers the same, or better, level of protection.

Contents

| | |
|--|-----------|
| Introduction | 02 |
| 1 Scope | 05 |
| 2 Formal consent | 05 |
| 3 Health, safety and environmental considerations | 07 |
| 4 Asset locating | 08 |
| 5 Temporary and permanent protective measures | 09 |
| 6 Working in the vicinity of a gas asset exceeding 2bar | 10 |
| 6.1 Excavation | |
| 6.2 Construction traffic | |
| 6.3 Specific activities | |
| 6.4 Back filling | |
| 7 Working in the vicinity of a gas asset not exceeding 2bar | 20 |
| 7.1 Excavation | |
| 7.2 Construction traffic | |
| 7.3 Specific activities | |
| 7.4 Back filling | |
| 8 Working in the vicinity of an Above Ground Installation | 29 |
| 9 Action in case of damage | 29 |
| 10 References | 30 |
| 11 Glossary of terms | 30 |
| Appendix A – Asset location markers | 31 |

Smell gas? Call the free, 24 hour National Gas Emergency Service:

0800 111 999*

*All calls are recorded and may be monitored

Introduction



Specification for safe working in the vicinity of Cadent assets – requirements for third parties.

This specification is for issue to third parties carrying out work in the vicinity of Cadent gas assets and associated installations. It is provided to ensure that individuals planning and undertaking work take appropriate measures to prevent damage.

Any damage to a gas asset, or its coating can affect its integrity and can result in failure of the asset with potentially serious hazardous consequences for individuals located in the vicinity.

It is therefore essential that the safety advice outlined in this document is complied with when working near to a Cadent asset. If Cadent consider any work to be in breach of the requirements stipulated in this document, then the Cadent responsible person will request that work is suspended until the non-compliances have been rectified.

Keeping you, your workers and the public safe when working near our pipelines.



The Pipelines Safety Regulations 1996 state that 'No person shall cause such damage to a pipeline as may give rise to a danger to persons' (Regulation 15). Failing to comply with these requirements could therefore result in prosecution by the Health and Safety Executive (HSE). The requirements in this document are in line with the requirements of the Institution of Gas Engineers and Managers (IGEM) recommendations *IGEM/SR/18 Edition 3 Safe Working Practices to Ensure the Integrity of Gas Assets and Associated Installations* and the HSE's guidance document *HS(G)47 Avoiding Danger from Underground Services*. It is the responsibility of the third party to ensure that any work carried out also conforms with the requirements of the Construction and Design Management (CDM) Regulations 2015 and all other relevant health and safety legislation.

Always contact Cadent prior to carrying out any work in the vicinity of Cadent assets

Contact Cadent

Contact Cadent on 0800 688588 to obtain formal consent at least 14 days before starting work. See [Section 2](#) for more details.

Consider safety

Consider the safety requirements – [Section 3](#) of this document.

Inform Cadent and request asset location

For asset location please contact Cadent at least 14 days before work starts to request formal asset location. See [Section 4](#) of this document.

Observe restrictions

Observe Cadent restrictions on the allowed proximity of mechanical excavators and other power tools and the measures to protect the asset from construction vehicles when carrying out the work – [Sections 5, 6.1, 6.2, 7.1 and 7.2](#) of this document. **Note: Cadent may wish to monitor the work, consult Cadent to confirm whether or not this is the case.**

Specific activities

- No-dig techniques
- Change in cover
- Piling
- Seismic surveys
- Hot work
- Blasting
- Demolition
- Surface mineral extraction
- Landfilling
- Pressure testing
- Deep mining
- Wind and solar farms
- Crossing with plant and equipment

See [Sections 6.3 & 7.3](#)

Consult Cadent

Consult Cadent prior to any backfilling over, alongside or under the asset and obtain Cadent’s agreement to proceed. Normally Cadent requires 48 hours’ notice prior to backfilling. See [Sections 6.4 & 7.4](#) of this document.

Important: This flowchart should be used in conjunction with the entire SSW22 document and not in isolation. If, at any time during the works, the asset is damaged even slightly then observe the precautions in [Section 9](#) of this document.

If in doubt, contact Cadent.

1 Scope

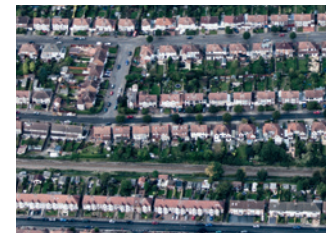
This specification sets out the safety precautions and other conditions associated with working in the vicinity of all Cadent assets, located in both negotiated easements ([see Section 11](#)) and public highways.

2 Formal consent

Cadent assets are located either, within an easement agreed with the landowner (at the time of installation) or within the highway. As the required arrangements for working within an easement and working within the highway differ, this document highlights the specific requirements for these two types of area.

No work shall be undertaken in the vicinity of the asset without the formal written consent of Cadent.

Any documents handed to contractors, or other individuals undertaking work (e.g. farmer, local authority etc.), on site by Cadent, shall be signed for by the site manager (to be shared with all individuals on site).





2 Formal consent

2.1 Within an easement

The promoter of any works (see Section 11) within an easement (or within 3m of asset location) shall provide Cadent with details of the proposed works including a risk assessment and method statement of how the work is intended to be carried out. Work shall not go ahead until formal written consent has been given by Cadent. This will include details of Cadent's protection requirements, contact telephone numbers and the emergency telephone number. On acceptance of Cadent's requirements, the promoter of the works shall give Cadent at least 14 days' notice before commencing work on site.

In addition to formal written consent, an easement crossing agreement (deed of indemnity) may be required. This shall be discussed with the Cadent responsible person prior to the commencement of the works.

2.2 Within a highway

Work shall be notified to Cadent in accordance with the requirements of The New Roads and Street Works Act (NRSWA) and HS(G)47. The promoter of any works within the highway should provide Cadent with details of the proposed works, including a risk assessment and method statement of how the work is intended to be carried out. This shall be submitted at least 14 days before the planned work is to be carried out. If similar works are being carried out at a number of locations in close proximity, a single risk assessment and method statement should be adequate depending on the nature of the works. Work should not go ahead until formal written consent has been given by Cadent. This will include details of Cadent's protection requirements, contact telephone numbers and the emergency telephone number.

3 Health, safety and environmental considerations

3.1 Safe control of operations

All working practices shall be agreed by Cadent prior to work commencing. All personnel working on site shall be made aware of the potential hazard of the asset and the actions they should follow in case of an emergency.

3.2 Deep excavations

Special consideration should be given to the hazards associated with deep excavations when working within or at a close proximity to the asset.

3.3 Positioning of plant

Unless written authority has been given by Cadent, mechanical excavators and any other powered mechanical plant shall not be sited or moved over an asset location. Mechanical excavators and any other powered mechanical plant shall not dig on one side of the asset when the cab of the excavator positioned on the other side. Mechanical excavators, any other powered mechanical plant, and other traffic shall be positioned far enough away from the asset trench to prevent trench wall collapse.

3.4 Risk assessment

Works in the vicinity of gas assets may have an impact on the safety of the general public, site workers, Cadent staff and contractors, and may affect the local environment. Anyone (e.g. contractors, site workers, farmers, local authorities etc.) working close to the asset, shall carry out suitable and adequate risk assessments. The risk assessment must have acceptance from the Cadent responsible person prior to the commencement of work, to ensure that all such issues are properly considered and risks mitigated.



4 Location of gas assets

Cadent asset records shall be consulted to establish the indicative location of the gas assets in relation to the promoters work area.

Prior to site work commencing the gas assets should be located to verify the indicative location.

This should be carried out through non-intrusive methods utilising pipe locators. Once located the gas assets should be marked out at regular intervals using asset location markers with triangular flags (see [Appendix A](#)) or other suitable methods.

The requirements for trial holes to locate the asset or determine levels at crossing points shall be determined on site by the Cadent responsible person.

For assets exceeding 2 bar, the excavation of all trial holes shall be monitored by Cadent. For assets not exceeding 2 bar, this monitoring will be at the discretion of the Cadent responsible person. Any changes shall be agreed by Cadent.

Safe digging practices, in accordance with HSE publication HS(G)47 should be followed. Direct and consequential damage to gas plant can be dangerous both to employees and to the general public

5 Temporary and permanent protective measures

No temporary or permanent protective measures, including the installation of concrete slab protection, shall be installed over or near to the Cadent asset without the prior permission of Cadent. Cadent will need to approve the material, dimensions and method of installation of the proposed protective measure.

The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to Cadent. Where permanent slab protection is to be applied over the asset, Cadent will normally carry out a coating survey of metallic assets to check that there is no existing damage to the coating prior to the slab protection being put in place.

Cadent shall therefore be given at least 14 days notice prior to the laying of any slab protection to arrange for this survey to be carried out.

Generally, due to the need for future access to below 2 bar gas assets, permanent slabs are not permitted but, can be approved at Cadent's discretion.

The safety precautions detailed in [section 3](#) and either [section 6](#) or [7](#) of this document should also be observed during the installation of the asset protection.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.1 Excavation

6.1.1 In proximity to an asset in an easement

Following location and marking of the asset in agreement with the Cadent responsible person, powered mechanical excavation may be used no closer than 3 meters (see Figure 1). The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

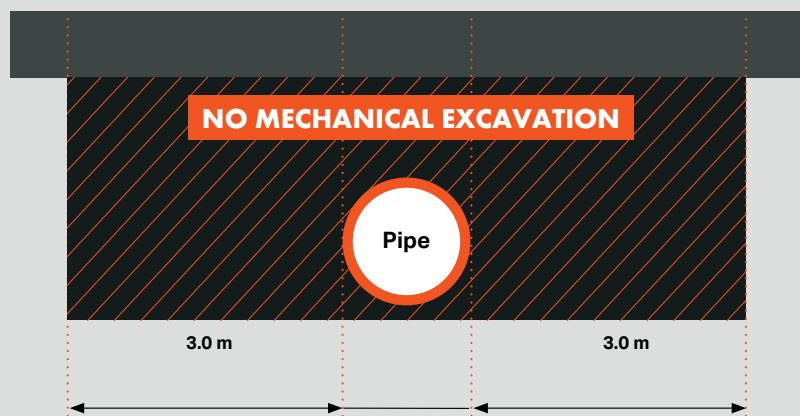
Any fitting, attachment or connecting pipework on the asset shall be exposed by hand. If third parties are using any form of trench support system they shall ensure that none of the components are in contact with the Cadent asset.

Consideration may be given to a relaxation of these limits or lower risk excavation methods by agreement with the Cadent responsible person on site.

Where sufficient depth of cover exists and the absence of attachments and projections has been confirmed (e.g. valve spindles, pressure points etc.) and following evidence from hand dug trial holes, light tracked vehicles may be permitted to strip topsoil to a depth of 0.25 metres, using a toothless bucket.

No topsoil or other materials shall be stored within the easement without the written permission of Cadent. No fires are allowed in the easement strip or close to above ground gas installations.

Figure 1. Excavation restrictions



After the completion of the work, the level of cover over the asset should be the same as that prior to work commencing, unless otherwise agreed by Cadent.

No new service shall be laid parallel to the asset within the easement. In special circumstances, and only with formal written agreement from Cadent, this may be relaxed for short excursions where the service shall be laid no closer than 0.6 metres.

Where work is being carried out parallel to the asset, within or just alongside the easement, suitable barriers shall be erected for protection between the works and the asset to prevent encroachment.

6.1.2 In proximity to an asset in the highway

Following location and marking of the asset in agreement with the Cadent responsible person, powered mechanical excavation may be used no closer than 3 meters (see Figure 1).

The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

Any fitting, attachment or connecting pipework shall be exposed by hand.

If third parties are using any form of trench support system they shall ensure that none of the components are in contact with the Cadent asset.

Removal of the bituminous or concrete highway surface layer by mechanical means is permitted to a depth of 0.3 metres, unless any attachments or projections are present on the asset (e.g. valve spindles, pressure points etc.). The use of chain trenchers is not permitted within 3 metres of the asset. The Cadent responsible person may need to be present to monitor this work. Where the bituminous or concrete highway surface layer extends below 0.3 metres deep, it shall only be removed by handheld power assisted tools under the observation of Cadent.

In special circumstances, consideration may be given to a relaxation of these rules by agreement with the Cadent responsible person and only whilst they remain on site.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.1.3 Crossing over an asset (Open cut)

Where a new service is to cross over the asset, a clearance distance of 0.6 metres between the crown of the asset and underside of the service should be maintained. If this cannot be achieved, the service shall cross below the asset, (see section 6.1.4).

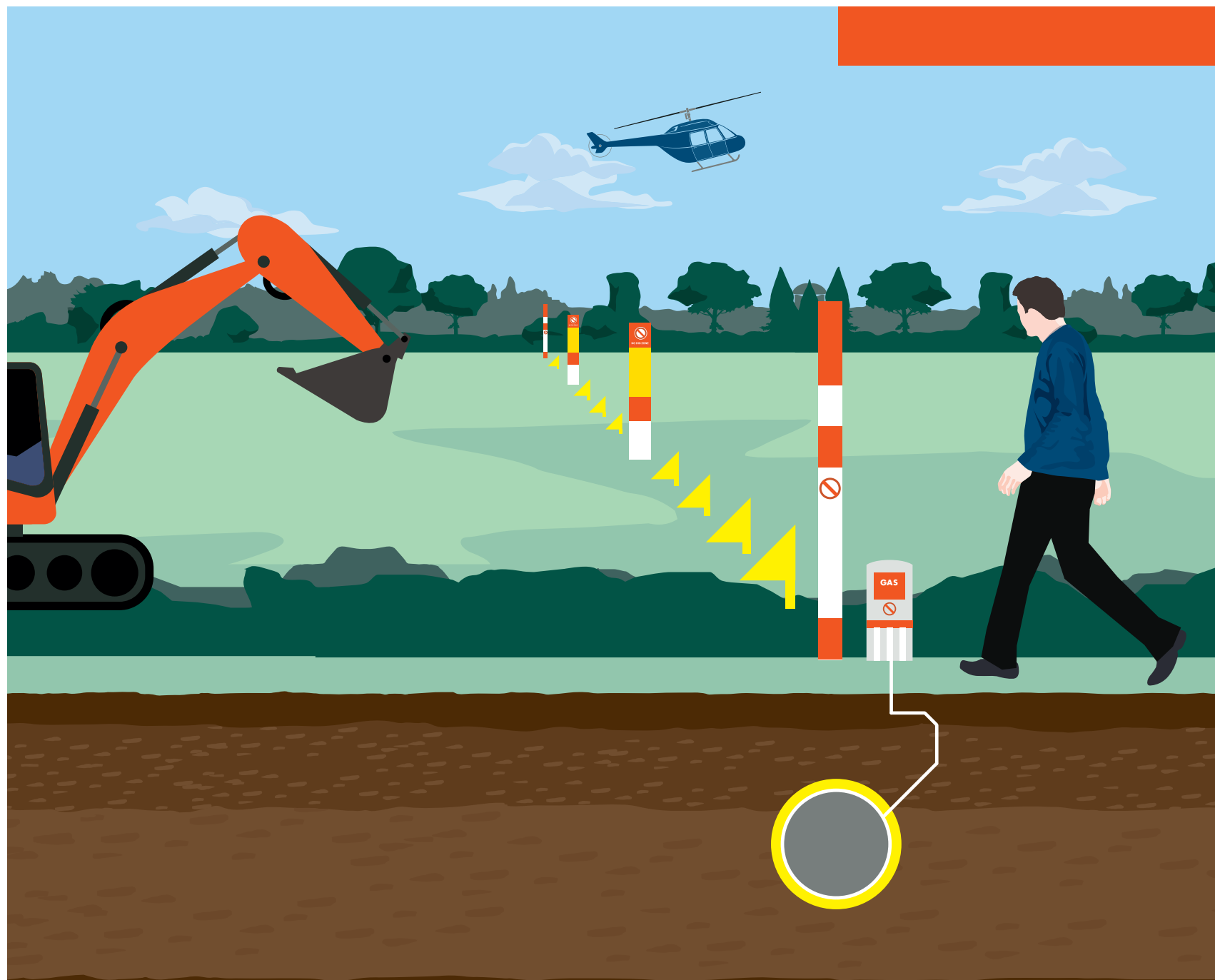
In special circumstances, this distance may be reduced at the discretion of the Cadent responsible person on site.

6.1.4 Crossing below an asset (Open cut)

Where a service is to cross below the asset, a clearance distance of 0.6 metres between the crown of the service and underside of the asset shall be maintained. Where lengths of pipe greater than one metre are to be exposed, the Cadent responsible person shall be consulted.

The exposed asset/s should be suitably supported and protected by matting and timber cladding. Any supports shall be removed prior to backfilling.

In special circumstances, this clearance distance may be reduced at the discretion of the Cadent responsible person on site.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.1.5 Cathodic protection

Cathodic protection (CP) is applied to Cadent's buried steel pipe and is a method of protecting assets from corrosion by maintaining an electrical potential between the pipe and anodes placed at strategic points along the asset.

Where a new service is to be laid and similarly protected, the party installing the CP system will undertake tests to determine whether the new service is interfering with the cathodic protection of the Cadent asset.

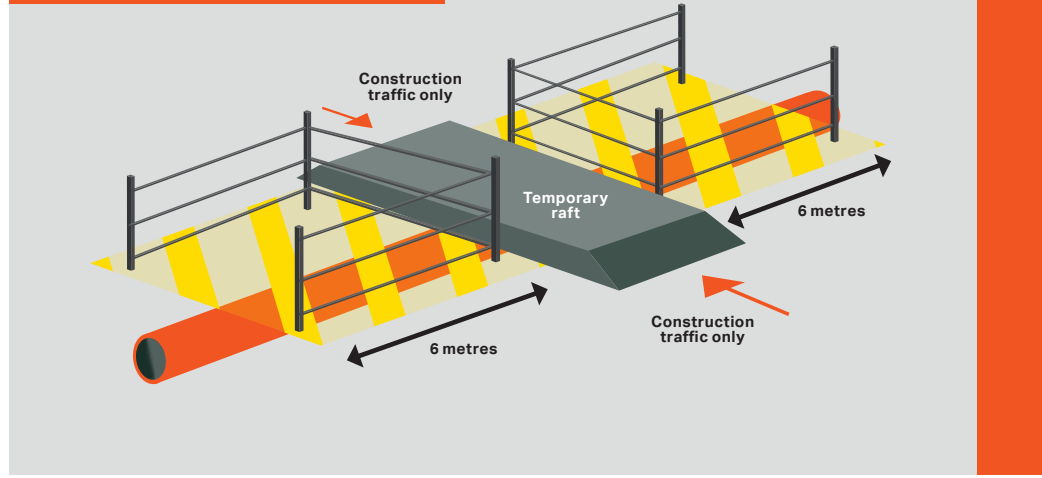
Should any cathodic protection posts or associated apparatus need to be moved to facilitate third party works, at least 14 days notice shall be given to Cadent. Cadent will undertake this work and any associated costs will be borne by the third party.

6.1.6 Installation of electrical equipment

Where electrical equipment is being installed close to Cadent's buried steel assets, the effects of a rise of earth potential under fault conditions shall be considered by the third party and a risk assessment and method statement shall be submitted to Cadent for approval, prior to the works.

The installation of electrical cables parallel to Cadent assets may induce currents into the asset. This may interfere with the effective operation of the cathodic protection system. In these instances, Cadent will require the promoter of the works to conduct pre and post energisation potential surveys of Cadent's asset. The costs for any stray current mitigation systems required will be borne by the third party promoter.

Figure 2. Construction traffic requirements



6.2 Construction traffic

Where existing roads cannot be used, construction traffic should ONLY cross the asset at agreed locations. Notices shall be placed directing traffic to the crossing points. Post and wire fencing shall be erected at all crossing points. The fence should cover the width of the easement and extend a further 6 metres along the length of the easement on both sides. **(See figure 2)**

The asset shall be protected, at the crossing points by a suitable method agreed with the Cadent responsible person prior to installation. The third party shall review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.

For larger scale projects, or permanent solutions, a protection slab may be required.

6.3 Specific activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of the asset. The promoter of works is required to consult Cadent when intending to undertake one of the listed activities and/or further advice is required on whether the work has the potential to affect the asset. The table to the right shows, for some specific activities, the prescribed distances where the advice of Cadent shall be sought **(see sections 6.3.1 to 6.3.13 for further details)**

| Activity | Distance within which Cadent advice shall be sought |
|----------------------------|---|
| Piling | 15 m |
| Surface mineral extraction | 100m |
| Landfilling | 100 m |
| Demolition | 150 m or 400m for structure mass >10000 tonnes |
| Blasting | 500 m if the MIC is greater than 200 kg 250 m if the MIC is greater than 10 kg but less than 200 kg 100 m if the MIC is 10 kg or less. |
| Deep mining | 1000 m |
| Wind turbine | Not permitted within 1.5 times the turbine mast height from the nearest edge of a pipeline (please see www.ukopa.co.uk) |

6 Working in the vicinity of a gas asset exceeding 2 bar

6.3.1 Trenchless techniques

Where trenchless techniques are being considered, a formal risk assessment and method statement shall be produced. This risk assessment and method statement shall be formally agreed with Cadent prior to the commencement of the work. Please provide Cadent with at least 14 days notice as the Cadent responsible person may wish to be present to monitor this work.

6.3.2 Changes to depth of cover

The depth of cover over Cadent's asset shall not be altered. Cadent shall be consulted for any activity proposed that will lead to a change in cover over the asset. Expert advice may need to be sought, which will be determined by the Cadent responsible person.

6.3.3 Piling

No piling shall be allowed within 15 metres of an asset without an assessment of the vibration levels at the asset. The peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec. The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

6.3.4 Demolition

No demolition should be allowed within 150 metres of an asset, or 400 metres for a structure mass greater than 10,000 tonnes, without an assessment of the vibration levels at the asset. The peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

6.3.5 Blasting

The Maximum Instantaneous Charge (MIC) dictates the distance at which an assessment of the vibration levels (at the located asset) is required. The measured distances are as follows:

- 500 m if the MIC is greater than 200 kg
- 250 m if the MIC is greater than 10 kg but less than 200 kg
- 100 m if the MIC is 10 kg or less.

The peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.3.6 Surface mineral extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100 metres of an asset. Consideration should also be given to extraction around other plant and equipment associated with assets (e.g cathodic protection ground beds).

Where the mineral extraction extends up to the asset easement, a stable slope angle and stand-off distance between the asset and slope crest shall be determined by Cadent. The easement strip should be clearly marked by a suitable permanent boundary, such as a post and wire fence. Additionally, where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the third party. The asset easement and slope needs to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including:

- bulging,
- the development of tension cracks on the slope or easement,
- any changes in drainage around the slope.

The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100 metres of the asset but do not extend up to the asset easement boundary, Cadent shall assess

whether this could promote instability in the vicinity of the asset. This may occur where the asset is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives, the provisions of **section 6.3.5 apply**.

6.3.7 Deep Mining

Assets routed within 1 km of active deep mining may be affected by subsidence resulting from mineral extraction. The determination of protective or remedial measures will normally require expert assistance, which can be arranged through Cadent.



6 Working in the vicinity of a gas asset exceeding 2 bar

6.3.8 Landfilling

The creation of slopes outside of the asset easements may promote instability within the vicinity of the asset. Cadent should carry out an assessment to determine the effect of any landfilling activity within 100 metres of an asset. The assessment is particularly important if landfilling operations are taking place on a slope in which the asset is routed.

6.3.9 Pressure testing

Hydrostatic testing of a third party asset should not be permitted within 8 metres either side of a Cadent asset, to provide protection against the effects of a burst. Where this cannot be achieved, typically where the third party asset needs to cross a Cadent asset, one of the following precautions would need to be adopted:

- a) limiting of the design factor of the third party pipeline to 0.3 at the asset's nominated maximum operating pressure (MOP), and the use of pre-tested pipe, or
- b) the use of sleeving, or
- c) Cadent conduct risk analysis of pipe failure

In either case, the third party shall submit their site specific risk assessment and safe system of works for consideration by Cadent.

6.3.10 Seismic surveys

The promoter of works shall advise Cadent of any seismic surveying work in the vicinity of an asset that will result in peak particle velocities in excess of 50 mm/ sec at the asset.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

6.3.11 Hot work

Where the Cadent's metallic gas asset has been exposed, welding (or other hot works that may involve naked flames) should not be carried out in proximity of the gas asset. This may be reduced if suitable protection and precautions has been agreed with Cadent.

If the gas asset is PE (or a PE asset is contained within a metallic sleeve) welding, or other hot works that may involve naked flames, should not take place within 0.5 m of the gas asset. This may be reduced if suitable protection and precautions have been agreed with the Cadent responsible person to prevent against the effects of sparks, radiant heat transfer etc.

The Cadent responsible person will be present to monitor all welding, burning or other 'hot work' that takes place.

6.3.12 Wind turbines

Wind turbines shall not be sited any closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of the asset.

6.3.13 Solar farms

Solar farms can be built adjacent to assets but never within the easement. Advice shall be sought from Cadent at the early stages of design to ensure that electrical interference, security, future access and construction methods can be mutually agreed.

6.4 Backfilling

No backfilling should be undertaken without Cadent's agreement to proceed. The Cadent responsible person will stipulate the necessary consolidation requirements. Some equipment may not be suitable for use over or around the asset due to the adverse effects of excessive compaction and vibration levels. The Cadent responsible person will be able to advise on suitable equipment. Third parties undertaking work shall provide Cadent with 48 hours notice, or shorter only if agreed with Cadent, of the intent to backfill over, under or alongside the asset.

This requirement should also apply to any backfilling operations that:

- are within 3 metres of the asset, or
- could influence the ground stability.

Any damage to the asset or coating shall be reported to Cadent in order that damage can be assessed and repairs can be carried out.

Minor damage to pipe coating and test leads will be repaired by Cadent free of charge. If the asset has been backfilled without the knowledge of the Cadent responsible person, the third party will need to re-excavate to enable the condition of the asset coating to be assessed.



7 Working in the vicinity of a gas asset not exceeding 2 bar

7.1 Excavation

7.1.1 Working in vicinity of iron pipework

Where excavation work this is deeper than 1.5 metres is within 8 metres of grey iron mains an integrity assessment will be required by the Cadent responsible person.

Care should be taken to ensure that any cast iron asset is suitably protected and supported during the works. This is due to the susceptibility of the pipe material to fracture and joint leakage.

Precautionary measures should be agreed with the Cadent responsible person before exposing an iron fitting, for example, bend, tee or cap, etc. This is to ensure that fittings that are not self-anchored are adequately protected against failure during excavation.

7.1.2 In proximity to an asset in an easement

Excavation with a powered mechanical excavator should not be carried out until the asset has been located using vacuum or hand excavation. All mechanical excavation should be undertaken whilst utilising a banksman and shall not be permitted within 0.5 metres of the asset.

The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

Any fitting, attachment or connecting pipework shall be exposed by hand. If third parties are using any form of trench support system they shall ensure that none of the components are in contact with the Cadent asset.

Consideration may be given to a relaxation of these limits or lower risk excavation methods by agreement with the Cadent responsible person on site.

Where sufficient depth of cover exists and the absence of attachment and projections has been confirmed (e.g. valve spindles, pressure points etc.) and following evidence from hand dug trial holes, light tracked vehicles may be permitted to strip topsoil to a depth of 0.25 metres, using a toothless bucket.

No topsoil or other materials shall be stored within the easement without the written permission of Cadent. No fires are allowed in the easement strip or close to above ground gas installations.

After the completion of the work, the level of cover over the asset should be the same as that prior to work commencing, unless otherwise agreed with by Cadent.

No new service shall be laid parallel to the asset within the easement. In special circumstances, and only with formal written agreement from Cadent, this may be relaxed for short excursions where the service shall be laid no closer than 0.6 metres.

Where work is being carried out parallel to the asset, within or just alongside the easement, suitable barriers shall be erected for protection between the works and the asset to prevent encroachment.

7.1.3 In proximity to an asset in the highway

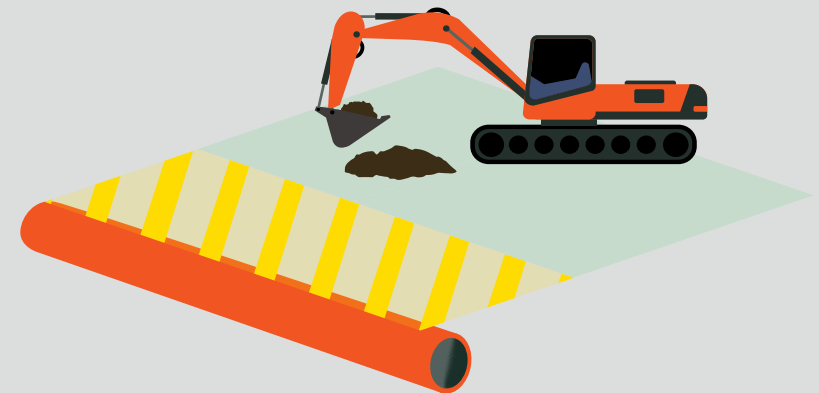
Excavation with a powered mechanical excavator should not be carried out until the asset has been located using vacuum or hand excavation. All mechanical excavation should be undertaken while utilising a banksman and shall not be permitted within 0.5 metres of the asset.

The use of toothed excavator buckets vastly increases the potential for damage to assets, therefore only toothless buckets shall be used.

Any fitting, attachment or connecting pipework on the asset shall be exposed by hand. If third parties are using any form of trench support system they shall ensure that none of its components are in contact with the asset.

Removal of the bituminous or concrete highway surface layer by mechanical means is permitted to a depth of 0.3 metres, unless any attachments or projections are present on the asset (e.g. valve spindles, pressure points etc.). The use of chain trenchers to do this is not permitted within 3 metres of the asset. The Cadent responsible person may need to be present to monitor this work. Where the bituminous or concrete highway surface layer extends below 0.3 metres deep, it shall only be removed by handheld power assisted tools under the observation of Cadent.

In special circumstances, consideration may be given to a relaxation of these rules by agreement with the Cadent responsible person on site and only whilst they remain on site.



7 Working in the vicinity of a gas asset not exceeding 2 bar

7.1.4 Crossing over an asset (Open cut)

Where a new service is to cross over the asset, a minimum clearance distance of 1.5 times the diameter or 0.3 metres, whichever is greater should be maintained. If this cannot be achieved, the service shall cross below the asset, see **Section 7.1.4.**

In special circumstances, this distance may be reduced at the discretion of the Cadent responsible person on site.

7.1.5 Crossing below an asset (Open cut)

Where a service is to cross below the asset, a minimum clearance distance of 1.5 times the diameter or 0.3m, whichever is greater, between the crown of the new service and underside of the asset shall be maintained. The exposed asset/s should be suitably supported and protected by matting and timber cladding. Any supports shall be removed prior to backfilling.

7.1.6 Cathodic protection

Cathodic protection (CP) is applied to some buried steel pipes and is a method of protecting assets from corrosion by maintaining an electrical potential between the asset and anodes placed at strategic points along the asset. Where a new service is to be laid and similarly protected, the party installing the CP system will undertake tests to determine whether the new service is interfering with the cathodic protection of the Cadent asset.

Should any cathodic protection posts or associated apparatus need moving to facilitate third party works, appropriate notice, at least 14 days, shall be given to Cadent. Cadent will undertake this work and any associated costs will be borne by the third party.

7.1.7 Installation of electrical equipment

Where electrical equipment is being installed close to Cadent's buried steel asset, the effects of a rise of earth potential under fault conditions shall be considered by the third party and a risk assessment and method statement shall be submitted to Cadent for approval, prior to the works.

The installation of electrical cables parallel to Cadent assets may induce currents into the asset. This may interfere with the effective operation of the cathodic protection system. In these instances, Cadent will require the promoter of the works to conduct pre and post energisation potential surveys of Cadent's asset. The costs for any stray current mitigation systems required will be borne by the third party promoter.

7.2 Construction traffic

Where existing roads cannot be used, construction traffic should ONLY cross the asset at agreed locations. Notices shall be placed directing traffic to the crossing points. Post and wire fencing shall be erected at all crossing points. The fence should cover the width of the easement and extend a further 6 metres along the length of the easement on both sides. **(See figure 2)**

The asset shall be protected, at the crossing points, by a suitable method agreed with the Cadent responsible person prior to installation. The third party shall review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.

For larger scale projects, or permanent solutions, a protection slab may be required.

7.3 Specific activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of the asset. The promoter of works is required to consult Cadent when intending to undertake one of the listed activities and/or further advice is required on whether the work has the potential to affect the asset. The table to the right shows, for some specific activities, the prescribed distances where the advice of Cadent shall be sought **(see Sections 6.3.1 to 6.3.13 for further details)**

| Activity | Distance within which Cadent advice shall be sought |
|----------------------------|---|
| Piling | 15 m |
| Surface mineral extraction | 100 m |
| Landfilling | 100 m |
| Demolition | 150 m or 400m for structure mass >10000 tonnes |
| Blasting | 500 m if the MIC is greater than 200 kg 250 m if the MIC is greater than 10 kg but less than 200 kg 100 m if the MIC is 10 kg or less. |
| Deep mining | 1000 m |
| Wind turbine | Not permitted within 1.5 times the turbine mast height from the nearest edge of a pipeline (please see www.ukopa.co.uk) |



7 Working in the vicinity of a gas asset not exceeding 2 bar

7.3.1 Trenchless techniques

Where trenchless techniques are being considered, a formal risk assessment and method statement shall be produced. This risk assessment and method statement shall be formally agreed with Cadent prior to the commencement of the work. Please provide Cadent with at least 14 days notice as the Cadent responsible person may wish to be present to monitor this work.

7.3.2 Changes to depth of cover

The depth of cover over Cadent's asset shall not be altered. Cadent shall be consulted for any activity proposed that will lead to a change in cover over the asset. Expert advice may need to be sought, which will be determined by the Cadent responsible person.

7.3.3 Piling

No piling shall be allowed within 15 metres of an asset without an assessment of the vibration levels at the asset.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

For ductile or cast iron assets, the peak particle velocity shall be limited to a maximum level of 25 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

7.3.4 Demolition

No demolition should be allowed within 150 metres of an asset for 400m for a structure mass greater than 10000 tonnes without an assessment of the vibration levels at the asset.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

For cast iron or ductile iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.

7.3.5 Blasting

The Maximum Instantaneous Charge (MIC) dictates the distance at which an assessment of the vibration levels (at the located asset) is required. The measured distances are as follows:

- 500 m if the MIC is greater than 200 kg
- 250 m if the MIC is greater than 10 kg but less than 200 kg
- 100 m if the MIC is 10 kg or less.

For steel or PE assets, the peak particle velocity at the asset shall be limited to a maximum level of 75 mm/sec.

For ductile or cast iron assets, the peak particle velocity at the asset shall be limited to a maximum level of 25 mm/sec.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

Where ground conditions include silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the asset shall be made. Expert advice may need to be sought, which can be arranged through Cadent.



7 Working in the vicinity of a gas asset not exceeding 2 bar

7.3.6 Surface mineral extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100 metres of an asset. Consideration should also be given to extraction around plant and equipment associated with assets (e.g cathodic protection ground beds).

Where the mineral extraction extends up to the asset easement, a stable slope angle and stand-off distance between the asset and slope crest shall be determined by Cadent. Where an easement exists, the easement strip should be clearly marked by a suitable permanent boundary, such as a post and wire fence. Additionally, where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the third party. The asset easement and slope needs to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including:

- bulging,
- the development of tension cracks on the slope or easement,
- any changes in drainage around the slope.

The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100 metres of the asset but do not extend up to the asset easement boundary, Cadent shall assess whether this could promote instability in the vicinity of the asset.

This may occur where the asset is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives, the provisions of **Section 7.3.5** apply.

7.3.7 Deep mining

Assets routed within 1 km of active deep mining may be affected by subsidence resulting from mineral extraction. The determination of protective or remedial measures will normally require expert assistance, which can be arranged through Cadent.

7.3.8 Landfilling

The creation of slopes outside of the asset easements may promote instability within the vicinity of the asset. Cadent should carry out an assessment to determine the effect of any landfilling activity within 100 metres of an asset. The assessment is particularly important if landfilling operations are taking place on a slope in which the asset is routed.

7.3.9 Pressure testing

Pressure testing should not be permitted within 8 m of an asset unless suitable precautions have been taken against the effects of a pipe failure.

7.3.10 Seismic surveys

The promoter of works shall advise Cadent of any seismic surveying work in the vicinity of PE or steel assets that will result in peak particle velocities in excess of 50 mm/sec at the asset or for ductile or cast iron assets that will result in peak particle velocities in excess of 25 mm/sec at the asset.

The promoter of the works should provide Cadent the anticipated vibration levels prior to the work commencing. The ground vibration should be monitored by the promoter to verify the anticipated levels and to ensure allowable peak particle velocity is not exceeded. Alarms should be set at suitable increments to provide a forewarning of limit exceedance. The promoter shall retain records of ground vibration levels for provision of the Cadent responsible person on request.

7.3.11 Hot work

Where the Cadent's metallic gas asset has been exposed, welding (or other hot works that may involve naked flames) should not be carried out in proximity of the gas asset. This may be reduced if suitable protection and precautions has been agreed with Cadent.

If the gas asset is PE (or a PE asset is contained within a metallic sleeve) welding, or other hot works that may involve naked flames, should not take place within 0.5 metres of the gas asset. This may be reduced if suitable protection and precautions have been agreed with the Cadent responsible person to prevent against the effects of sparks, radiant heat transfer etc.

The Cadent responsible person will determine the need to remain on site to monitor all welding, burning or other 'hot work' that takes place.

7.3.12 Wind turbines

Wind turbines shall not be sited any closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of the asset.

7.3.13 Solar Farms

Solar Farms can be built adjacent to assets but never within the easement. Advice shall be sought from Cadent at the early stages of design to ensure that electrical interference, security, future access and construction methods can be mutually agreed.



7 Working in the vicinity of a gas asset not exceeding 2 bar

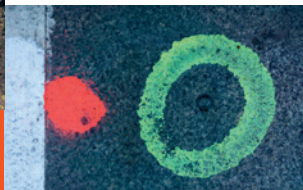
7.4 Backfilling

No backfilling should be undertaken without Cadent's agreement to proceed. The Cadent responsible person will stipulate the necessary consolidation requirements. Some equipment may not be suitable for use over or around the asset due to the adverse effects of excessive compaction and vibration levels. The Cadent responsible person will be able to advise on suitable equipment. Third parties undertaking work shall provide Cadent with 48 hours notice, or shorter notice only if agreed with Cadent, of the intent to backfill over, under or alongside the asset. This requirement should also apply to any backfilling operations that:

- are within 3 metres of the asset, or
- could influence the ground stability.

Any damage to the asset or coating shall be reported to the Cadent responsible person in order that damage can be assessed and repairs can be carried out.

Minor damage to pipe coating and test leads will be repaired by Cadent free of charge. If the asset has been backfilled without the knowledge of the Cadent responsible person, the third party will need to re-excavate to enable the condition of the asset coating to be assessed.



8 Working in the vicinity of an Above Ground Installation (AGI)

Where excavations are to be made within 10 metres of the perimeter of an associated gas installation, appropriate protection methods should be determined and recorded by the Cadent responsible person.

At least 14 days notice is required as Cadent may wish to be on site when specific activities are being undertaken.

In addition to this, the safety advice detailed in either section 6 or 7 shall be observed when working in the proximity of an AGI.

Access to the gas asset should be maintained at all times.

9 Action in the case of damage to the asset

If the Cadent asset is damaged, even slightly, and even if no gas leak has occurred, then the following precautions shall be taken immediately:

- Shut down all plant and machinery and extinguish any potential sources of ignition.
- Evacuate all personnel from the vicinity of the asset
- Notify Cadent using the free 24 hour emergency telephone number 0800 111999
- Notify the Cadent responsible person immediately using the contact telephone number provided.
- Ensure no one approaches the asset.
- Do not try to stop any leaking gas.
- Provide assistance as requested by Cadent, or emergency services to safeguard persons and property.

10 References

| | |
|-------------------|--|
| NRSWA | New Roads & Street Works Act |
| HS(G)47 | HSE Guidance 'Avoiding Danger from Underground Services' |
| IGEM/SR/18 | Safe Working Practices to Ensure the Integrity of Gas Pipelines and Associated Installations (Institution of Gas Engineers) |

11 Glossary of Terms

Easement

Easements are negotiated legal entitlements between Cadent and landowners and allow Cadent to lay, operate and maintain assets within the easement strip. Easement strips may vary in width, typically between 6 and 25 metres depending on the diameter and pressure of the pipeline. Consult Cadent for details of the extent of the easement strip where work is intended.

Liquefaction

Liquefaction is a phenomenon in which the strength and stiffness of the soil is reduced by earthquake shaking or other rapid loading. Liquefaction occurs in saturated soils, that is, soils in which the space between individual particles is completely filled with water. When liquefaction occurs, the strength of the soil decreases and the ability of the soil to support assets are reduced.

Promoter of works

The person or persons, firm, company or authority for whom new services, structures or other works in the vicinity of existing Cadent assets are being undertaken.

Cadent responsible person

The person or persons appointed by Cadent with the competencies required to act as the Cadent representative for the purpose of monitoring the particular activity.

Banksman

Another person who assists the machine operator to drive from a position where they can safely see into the excavation and warn the driver of any services or other obstacles.

This person should remain outside of the operating radius of the excavator arm and bucket.

Appendix A

Asset location markers

Cadent

Your Gas Network

DANGER

GAS ASSET

DIAL BEFORE YOU DIG

CALL 0800 688 588

24hrs GAS ESCAPE NUMBER

0800 111 999*

*CALLS WILL BE RECORDED AND
MAY BE MONITORED



Emergency

If you hit an asset, whether the damage is visible or not, or in the event of an emergency, call the National Gas Emergency Service immediately on

0800 111 999*

*All calls are recorded and may be monitored

If you are planning to do work near or in the vicinity of an asset, please contact the Plant Protection team for free on:

0800 688 588*
plantprotection@cadentgas.com

Cadent Plant Protection
Block 1
Brick Kiln Street
Hinckley
LE10 0NA

Self service for plant enquiries

beforeyoudig.nationalgrid.com

This is a free online enquiry service giving results within minutes from a grid reference, postcode or street name. This site allows you to submit enquiries about activities and work that you are planning, which may have an impact on the Cadent gas distribution and networks.

linesearchbeforeudig.co.uk

This is a free online enquiry service giving instant results from a grid reference, postcode or street name. If your result is within a zone of interest, you can click directly through to **cadentgas.com/digging-safely**.

Note

Line search service is not available for all Cadent assets. Therefore, please click on the Cadent link or call Plant Protection to ensure you have all the available information.

Copyright Cadent 2019 ©, all rights reserved. No part of this publication may be reproduced in any material form (including photocopying and restoring in any medium or electronic means and whether or not transiently or incidentally) without the written permission of Cadent, except in accordance with the provisions of the Copyright, Designs and Patents Act 1988.



Excavating Safely

Avoiding injury
when working
near gas pipes

Measures to stay safe and avoid damage when
working near gas distribution pipes

The following protective measures must be taken when excavating in the vicinity of Cadent gas apparatus at up to 7 bar pressure.

Reference should be made to the HSE Guidance Note HSG 47 'Avoiding Danger from Underground Services' and to 'Utilities Guidelines on Positioning and Colour Coding of Apparatus'. (The latter document can be downloaded free of charge at www.njug.org.uk).

To avoid injury to workers you must verify the details given on plans by; use of plant location equipment to trace all underground plant; hand dig trial holes to confirm the precise location of plant;

and use suitable paint or markers on the surface to clearly indicate the position of buried apparatus.

You must ensure full colour copies of Cadent plans are issued to the workers carrying out the excavations.

Every possible precaution must be taken to avoid personal injury or damage to Cadent apparatus during the progress of the works. Any costs incurred by Cadent for the repair of direct or consequential damage will be recharged in full.

Cadent reserves the right to divert any affected apparatus if proved necessary during the course of your works: the cost of which may be recharged – remember, if in doubt ask.

Surface boxes/manholes

Do not bury or move Cadent surface boxes. Access must be maintained both during and after your works. Cadent reserve the right to locate and/or realign any boxes not left in such condition upon completion of your works and at your expense. No manhole cover or other structure is to be built over, around, or under a gas pipe and no work is to be carried out which results in a reduction or increase in cover or protection, without agreement.

Clearances

Gas Pipes

No apparatus is to be laid directly above and along the line of existing gas pipes irrespective of clearance. Where new plant crosses over, or is laid alongside, an existing gas pipe, a minimum clearance of 250mm (or 1.5 times the external diameter of the gas pipe if this is greater) between the gas pipe and the new plant should be provided to allow future repair or maintenance. Where the minimum clearances cannot be met, or the work is close to a pipe operating above 2 bar (intermediate pressure), site discussions should be held with Cadent to agree a suitable clearance.

In case of a Gas Emergency

If you cause a gas leak, or suspect that gas pipe or equipment is leaking, you must take the following actions immediately:

- Inform the National Gas Emergency service immediately on 0800 111 999*.
- Stop work and get everyone away from the immediate vicinity of the escape.
- Do not attempt to stop the escape by filling the hole as gas may enter buildings.
- Do not attempt to operate any valves (unless directed by call centre staff to close emergency control valves at domestic properties).
- If escaping gas is entering properties, advise the occupants to leave until it is deemed safe to return by Cadent staff.

Minimum Safe Working Distances

Always contact Cadent for gas plans before carrying out any works. Furthermore, you must contact Cadent for specific guidance and safe working distances when undertaking the following activities in the vicinity of Cadent gas pipes:

use of explosives/blasting operations, piling, boring, construction works, demolition, deep excavations, road planing, levelling. Contact the plant protection team on 0800 688 588 for the minimum safe working distances.

Trial holes must be dug by hand to determine the exact location of mains and services in advance of mechanical excavating or thrust boring.

Intermediate Pressure Mains and Services

If you are planning to carry out any excavation works within 3.0 metres of an intermediate pressure gas pipe (operating between 2 and 7bar) you **MUST** contact the plant protection team on 0800 688 588 before you start work. In some circumstances Cadent apply the requirements of SSW22 for intermediate pressure mains.

Mechanical excavations

Mechanical excavators (including breaker attachments) MUST NOT be used within the following distances from gas mains.

| | |
|-----------------------|------------|
| Low Pressure | 0.5 metres |
| Medium Pressure | 0.5 metres |
| Intermediate Pressure | 3.0 metres |

Tree planting

If trees or shrubs are to be planted adjacent to our equipment, the selection of the type of tree or shrub and its planting must be considered so that root damage to buried mains or services will be avoided and that damage to trees or shrubs will not be caused by any subsequent excavations for repair and maintenance. Planting schemes should be submitted to Cadent for approval. We reserve the right to remove any tree/bush at any time in the future.



Backfilling

Concrete backfill should not be placed closer than 300mm to apparatus. No concrete or hard material should be placed under or adjacent to any apparatus.

Material used for the surround backfill of Cadent gas plant must conform to the following requirements:

- If sand, it must be well-graded in accordance with BS EN 12620: 2002.
- It must not contain any sharp particles.
- Foamed concrete should not be used.
- It must be laid to a minimum depth of 150mm above the crown of the apparatus. Power ramming should not take place until a 250mm hand rammed layer has been completed over the crown of the pipe.

Deep Excavations

If a sewer trench or any other water authority apparatus is to be constructed at greater than 1.5 metres deep near to a buried cast iron main, the model consultative procedure for pipeline construction involving deep excavations applies. Cadent is to be provided with detailed drawings showing the line and width of the proposed sewer or other apparatus trench, together with the soil group classifications of the area concerned.

- Damage to a service supplying a building may result in gas entering the building.
- Prevent any approach to the immediate vicinity of the escape.
- Prohibit smoking and extinguish all naked flames or other ignition sources for at least 15m from the leakage.
- Assist Cadent, Police or Fire Services as requested.

Smell gas? Call 0800 111 999 *

* All calls are recorded and may be monitored.

For Cadent gas plans, information on safe digging and advice on minimum safe working distances or any other gas plant enquiries, please contact the Cadent Plant Protection Team on

0800 688 588

Access

Access to sites and to Cadent apparatus must be provided at all times. Please ensure that any temporary structures (portakabins, welfare facilities, silos etc.) or spoil heaps are not placed over Cadent gas pipes as this may block access and cause excess loading on the pipes. For further advice contact the Cadent Plant Protection Team on 0800 688 588.

Crossing Cadent plant

The placing of heavy construction plant, equipment, materials or the passage of heavy vehicles over Cadent gas apparatus is prohibited unless specially agreed protective measures (i.e. the construction of reinforced crossing points) have been carried out. This is particularly important where reductions in side support or ground cover are planned.

Working in wayleaves or easements

Work should not be undertaken within a Cadent wayleave/easement without the formal written consent of Cadent.

Exposed plant

Where excavations adjacent to apparatus affect its support, the apparatus must be adequately supported and protected in consultation with and to the satisfaction of Cadent. All exposed plant must be protected from impact. Thrust blocks and supports must not be disturbed.

Welding, or other hot works involving naked flames, must not be carried out in the vicinity of exposed gas pipes without consent from Cadent and a prior agreement of precautions that will ensure the integrity of plastic pipes and protective coatings.

Shuttering must be constructed so as to prevent fresh concrete encasing Cadent gas apparatus and to maintain the stated clearances.

If you damage Cadent gas pipes or apparatus, including damage to wrapping or sleeving you must call 0800 111 999* immediately.

If you are working in the vicinity of gas pipes above 7 bar in pressure please contact us on 0800 688 588 if you have not already got a copy of **'SSW22 Safe working in the vicinity of Cadent high pressure pipelines and associated installations'**.

GAS DISTRIBUTION pipelines may be directly affected by work you are considering or intending to undertake.

Depending on where you are in England, Wales or Scotland you will need to contact the relevant gas distribution network company.

The adjacent map gives the contact numbers which you must call for plans and advice before working near any gas apparatus.

However, all gas emergency calls, irrespective of your location must be directed to the National Gas Emergency Service on 0800 111 999*.



Further Information

For free downloads of our 'Safe Excavation' films, this leaflet and other safety publications, please visit <http://www.cadentgas.com/dialbeforeyoudig>

Cadent is the largest utility in the UK.

Through Cadent Gas Ltd (formally part of National Grid plc), it owns and operates over 132,000 kilometres of lower-pressure distribution gas mains in the North West, the Midlands, East Anglia and North London – more than half of Britain's gas transportation network, delivering gas to around 11 million homes, offices and factories.

National Grid will continue to manage the National Gas Emergency Service freephone line 0800 111 999*.

* All calls are recorded and may be monitored.

APPENDIX 4

Cadent 2" PE
Isolation

Addendum

Our Reference:
NWGD205653

Your Reference:
Ryebank Fields (JL)

Cezary Pochwala
Design Officer
Email: cezary.pochwala@balfourbeatty.com
Direct tel. +44(0)161 790 3000
Mobile: +44(0)7783 148123

Date:
Thursday 13 February, 2020

Dave Ibbotson
Manchester Metropolitan University CO Fuel Solutions
Longford Road
Chorlton-cum-Hardy
Manchester
M21 9SR



Dear Dave,

**Re: Gas Mains Diversion(s) at Longford Road, Chorlton-cum-Hardy,
Manchester, M21 9SR**

Please find enclosed one copy of our plans showing the existing mains in this area. Inspection of your proposals and Cadent Gas' records would indicate that we have the following apparatus affected by the proposed works:

2"PE

Prior to the commencement of your scheme it will be necessary for you to undertake hand excavated trial holes to prove the exact depth and position of the above main(s). I would be pleased to receive details of your site investigations and proposed construction depths in due course for further assessment.

A budget cost for diverting the affected main(s) is £4000 (Four Thousand Pounds)

This estimate figure will also be subject to VAT charged at 20% .

Please see the following page for a list of specific inclusions, exclusions and information.

This budget estimate should be regarded as a rough guide only. It has been prepared using the information currently available. A detailed estimate, showing any allowances which may be applicable, can be prepared when the proposals are firmed up.

Please note that an official order, accompanied by payment in full for the rechargeable proportion of the costs, will be required before any programming of work can commence. An order cannot be accepted against this budget estimate.

Cadent Gas reserves the right to divert any affected apparatus if proved necessary during the course of your works, the cost of which will be recharged.

Copies of our "General Conditions and Precautions" leaflet and card, which outline the precautions to be taken whilst excavating in the vicinity of live gas distribution apparatus, are enclosed for your information.

I trust this is satisfactory, should you require any further details please do not hesitate to contact me.

Yours faithfully,



Cezary Pochwala
Design Officer
Mains Diversions Team
(On behalf of Cadent Gas plc)

Further Design Officer Comments:

This estimate is only for 2"PE LP main disconnection. IP main diversion is excluded.



Please be aware of the following:

1. Standard depth of cover for a Low Pressure gas main is 650mm - 700mm (FW) and 750mm (CW). The finished ground level above the mains must not be raised to greater than 1.2m or reduced to less than
2. Metallic mains have been known to fail as a result of major construction activities, even at standard depth, and may incur a necessary diversion.
3. No new kerb line, barrier or other street furniture should be set out to run directly over or within 300mm of an existing gas main. Any existing street furniture shall be removed, stored and reinstated by the customer **prior** to work commencing.
4. Gas mains must not become contained within the new carriageway formation. A fine fill layer of not less than 150mm must be maintained between the mains and the carriageway formation.
5. Gas mains must remain in Public Adopted Highway. Gas mains installed in private land must be subject to a free Deed of Grant of Easement in perpetuity.
6. If applicable, as a condition of doing the work, the client will be required to enter into a deed of easement with Cadent **prior** to work commencing and will be responsible for paying both their own and Cadent legal fees. This will require a direct undertaking from the grantors solicitors to Cadent panel solicitors.
7. All redundant apparatus will be capped, purged to air and left in situ. No pipework will be removed from site unless specifically requested.
8. If applicable, all existing meters shall be removed **prior** to work commencing.
9. A minimum of 10m should be accounted for when (re)planting Poplar and Willow Trees. A 6m allowance should be made for conifers and deciduous trees, and 1.5 - 6m for lesser trees and shrubs in accordance with standard tree planting guidelines.

The following have/have not not been included in this estimate:

Permanent Reinstatement in the public highway has been included.

Deep Excavation has not been included.

Specialist excavation & reinstatement has not been included

Traffic Management costs and logistics have been included.

T.T.R.O.s, Footpath Closures, Crossing & Bus Stop suspensions have not been included.

Peak hours uplift has not been included.

Fees for legal consents & permissions have not been included.

Professional fees (third party work) has not been included

Removal, storage & re-installation of Street Furniture has not been included

Testing, removal & disposal of contaminated materials & liquids has not been included

Removal & disposal of indigenous & non-indigenous vegetation (trees & plants) has not been included

If you discover a main that is not shown on Cadents' records, call Plant Protection on 0800 688 588

For Services/Connections, call 0800 074 5788



To report a gas emergency, call 0800 111 999



ALWAYS CONSULT UTILITY PLANS AND CARRY OUT PLANT LOCATION SURVEY BEFORE EXCAVATING

THIS DRAWING MUST BE VIEWED ON COLOUR



Permits and Authorisations
We never carry out any work unless we have the necessary current safety documentation, authorisation, permits and licences.

WARNING! This area contains Gas Mains Operating at Low Pressure of between 2 and 7 bar. Before excavating in the area contact the Local Network
WARNING! This area contains Gas Mains Operating at High Pressure (in excess of 7 bar) and Intermediate Pressure (between 2 and 7 bar). Before excavating in the area contact the Local Network

DETAILING NOTATIONS - PROPOSED

| | | | |
|--------------------|--|---------------------------------------|--|
| LP GAS MAIN | | ASSET ID CHANGE POINT | |
| MP GAS MAIN | | VALVE | |
| IP GAS MAIN | | CHANGE POINT - METHOD / DIA | |
| HP GAS MAIN | | CAPEND | |
| NH/P GAS MAIN | | SYPHON | |
| PROPOSED PIPE - LP | | TRIAL HOLE | |
| PROPOSED PIPE - MP | | SERVICE | |
| PROPOSED PIPE - IP | | EXCAVATION PIT | |
| ABANDON - LP | | TREE | |
| ABANDON - MP | | EXCAVATION REFERENCE / PROCEDURE | |
| RELAY | | PRESSURE REFERENCE | |
| TRANSFER | | UNIT REFERENCE | |
| RISER - PROPOSED | | >= 1.2m DEPTH TRENCH SUPPORT REQUIRED | |
| CONNECTION | | CAUTION SYMBOL | |
| WORK LOCATION | | Out Of Standard Service | |
| CAUTION ELECTRIC | | | |

HEALTH AND SAFETY INFORMATION
THIS DRAWING CONTAINS ALL RELEVANT INFORMATION ON SIGNIFICANT OR UNUSUAL RISKS FROM THE DESIGN AND / OR EXISTING IDENTIFIED SITE CONDITIONS

| UTILITY | MAJOR SERVICE | PRESENT | UTILITY | MAJOR SERVICE | PRESENT | |
|----------|--------------------------------|---------|---------|-----------------------|-----------------------|-----|
| Electric | 6.6kVA or above (Below ground) | Yes | Water | 12" and above | Yes | |
| | Overhead Cables | Yes | | | | |
| | Medium High Pressure | Yes | | | | |
| Gas | High Pressure | Yes | B.T. | Underground Apparatus | Yes | |
| | Intermediate Pressure | Yes | | | Underground Apparatus | Yes |
| | Medium Pressure | Yes | | | Underground Apparatus | Yes |
| Sewers | 12" and above | Yes | | Underground Apparatus | Yes | |
| | Asbestos | Yes | | Underground Apparatus | Yes | |
| | 600mm and above | Yes | | Underground Apparatus | Yes | |

FOR POSITION OF SERVICES REFER TO UTILITY DRAWINGS

THIS DRAWING SHOULD ALWAYS BE READ IN CONJUNCTION WITH THE CONSTRUCTION PACKS

SIGNIFICANT OR UNUSUAL RISKS
-SIGNIFICANT RISKS-

ENGINEERING DIFFICULTIES
-ENGINEERING DIFFICULTIES-

NRSWA / TRAFFIC MANAGEMENT
Work to be carried out in accordance with SAFETY AT STREET WORKS AND ROAD WORKS CODE OF PRACTICE BUS ROUTE - Y / N

BY-PASS REQUIREMENTS
SEE ROUTINE OPERATIONS PROCEDURE
NOTE: Temporary overhead bypasses are not identified on this drawing - A by-pass may be required to perform the construction technique identified. Consult the overview drawing for area feeds & always install bypasses as instructed within the SCO routine operation, in accordance with the specification as detailed in the Cadent management procedures for main laying & service laying.

CUSTOMER CARE
ENSURE PEDESTRIAN WALK-WAYS ARE PROVIDED AND DISABLED ACCESS MAINTAINED

ENVIRONMENTAL
SEE NJUG GUIDELINES FOR THE PLANNING, INSTALLATION AND MAINTENANCE OF UTILITY APPARATUS IN PROXIMITY TO TREES (VOLUME 4)

ASBESTOS CONTROL
WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE CONTROL OF ASBESTOS REGULATIONS 2006 PART II. Size / material / on (street name) TO BE REPLACED.

IN THE EVENT OF ANY DESIGN CHANGES CONTACT CHANGE NOTIFICATION - 0161 790 3000

PRINCIPAL QUANTITIES SCHEDULE

| Design ID | Street Name | Asset Type and SAP ID | Dia. (mm) (Inch) | Mat. | Method | Carrier/Inserted Pipe IDs | Services | | |
|------------------------|---------------|-----------------------|------------------|------|---------|---------------------------|------------|-------|----------|
| | | | | | | | Length (m) | Renew | Transfer |
| 1 | LONGFORD ROAD | LP Main 22000000244 | 2in | PE | Abandon | - | 105.86 | - | - |
| 2 | LONGFORD ROAD | LP Main 313311542 | 2in | PE | Abandon | - | 9.93 | - | - |
| 3 | - | LP Valve 894062053 | - | - | Remove | - | 0.00 | - | - |
| Total Length - LAY | | | | | | | 0.00 | 0 | 0 |
| Total Length - ABANDON | | | | | | | 115.79 | | |

CONSTRUCTION APPROVAL

| | |
|-----------------|----------|
| SIGNATURE | DATE |
| Cezary Pochwala | 13.02.20 |

DESIGN:- Cezary Pochwala
CONSTRUCTION:-

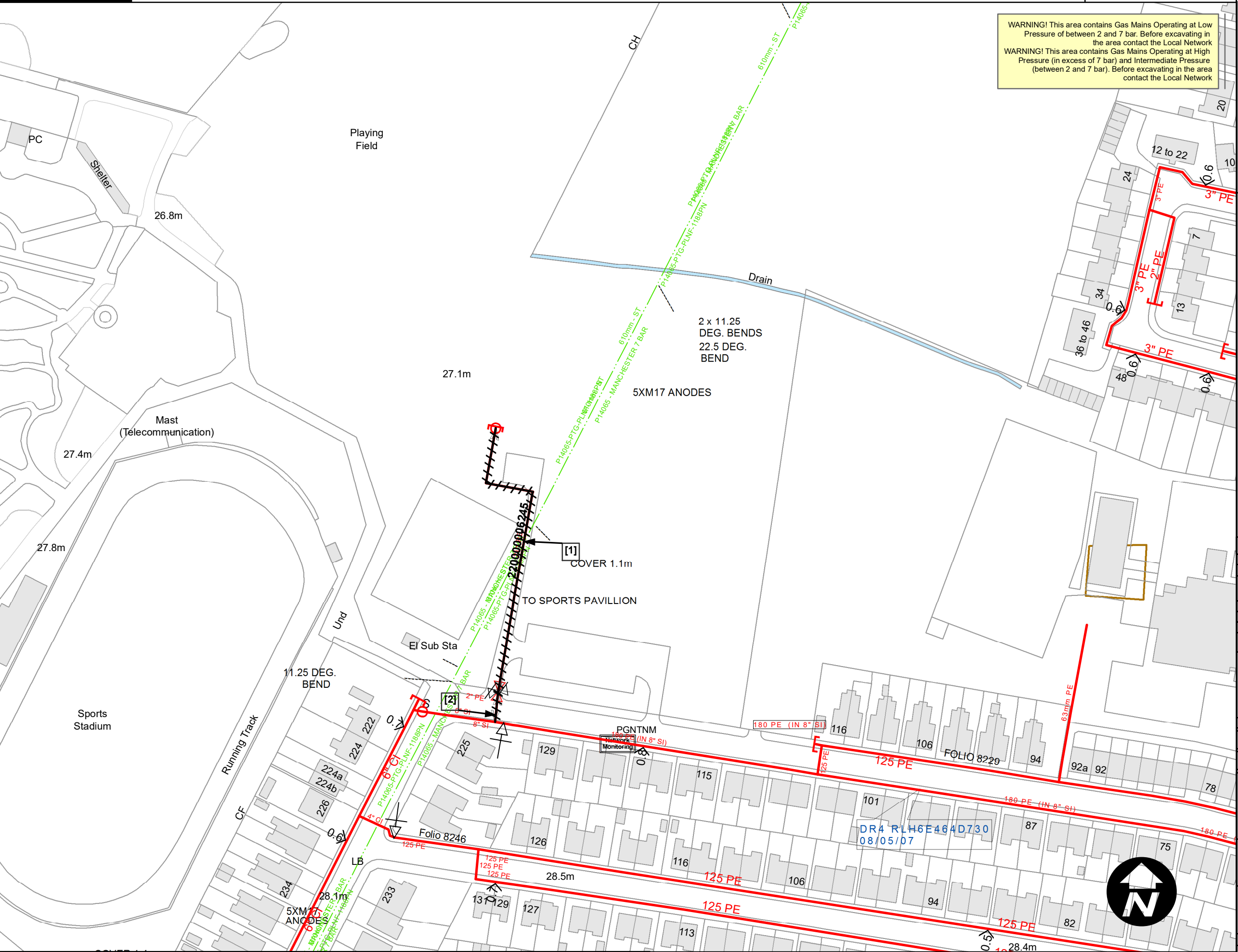
SCHEME: Longford Road
DESIGN: NWGD205653
MAP REF: 381035, 394505



SUPER PROJECT:- <SUPER PROJECT NAME>
POSTAL CODE:- <POSTAL CODE>
WORK PACKAGE:- <WORK PACKAGE NAME>
LOCATION:- <LOCATION>

| | | |
|---------------------------------|---------------------|----------------|
| OS Ref:- SJ8194 | Area <Area> | <Sheet 1 of 1> |
| CAD / Planner:- cezary.pochwala | Checked:- <Checked> | |
| Date:- 13-Feb-2020 10:57:32 | Date:- <Date> | |

1:1,250 @ A3
NTS - OTHER SIZES
DWG NO: NWGD205653



This plan shows only those pipes owned by Cadent in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs and also privately owned may be present in this area. Information with regard to such pipes should be obtained from the owners. The information shown on this plan is given without obligation, or warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited, its agents or servants for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and any other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Amendments

| REV | INITIAL DATE |
|--------|--------------|
| REV: A | |

DISCLAIMER CADENT IS NOT LIABLE IF THIS PLAN IS SHOWN TO BE INACCURATE. IT IS PROVIDED FOR INFORMATION ONLY ON THE APPROXIMATE POSITION OF MAINS AND OTHER APPARATUS. THERE IS NO CONTRACT AND NO WARRANTY IS IMPLIED AS TO THE ACCURACY OF THIS PLAN. COPYRIGHT BASED UPON THE ORDINANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF H.M. STATIONERY OFFICE. CROWN COPYRIGHT RESERVED LICENCE No. 100058025

APPENDIX 5

New

Infrastructure

POC's

- Cadent
- ENW
- UU Water

Network Enquiry No : 180012234
Your Reference : NORTH END SITE

Cadent Gas Limited

National Gas Emergency Service - 0800 111 999* (24hrs)
*calls will be recorded and may be monitored

Mr David Ibbotson
Fuel Solutions
May Bank Business Centre
48 High Street
May Bank
Newcastle
ST5 0JB

Date : 10th February 2020
Contact : Performance and Support
Direct Tel : 0845 3666758
Email : networkdesign@cadentgas.com

www.cadentgas.com

Dear David,

Re: Land Enquiry for Proposed Development Site at NEW SUPPLY, RYEBANK ROAD, OLD TRAFFORD, MANCHESTER, M16 0HR.

Thank you for your enquiry which we received on 4th February 2020. I enclose details of Cadent Gas plant in the vicinity of your proposed supply.

The nearest main with sufficient capacity is 2 metres from the site boundary and it is a Low Pressure main.

This Developer Enquiry response is a reflection of the network at the time delivered and is not a guarantee of gas flow or capacity due to the changing dynamics of the gas distribution network. If you wish to secure capacity and connect to the network please submit quotation Connections Request via the official connections route allowing for further analysis to verify the capability of the network again.

Standard design pressures have been used. Refer to www.Cadentgas.com

Please be aware of existing mains or services within the site boundary that may require diversionary or abandonment works, this will be costed upon receipt of a firm request.

Plans attached: Yes

A copy of the Cadent Connections Charging Statement referenced in this letter can be found on Cadent's website:

<http://cadentgas.com/Get-connected>

If you require a printed version please contact us on the details provided above.

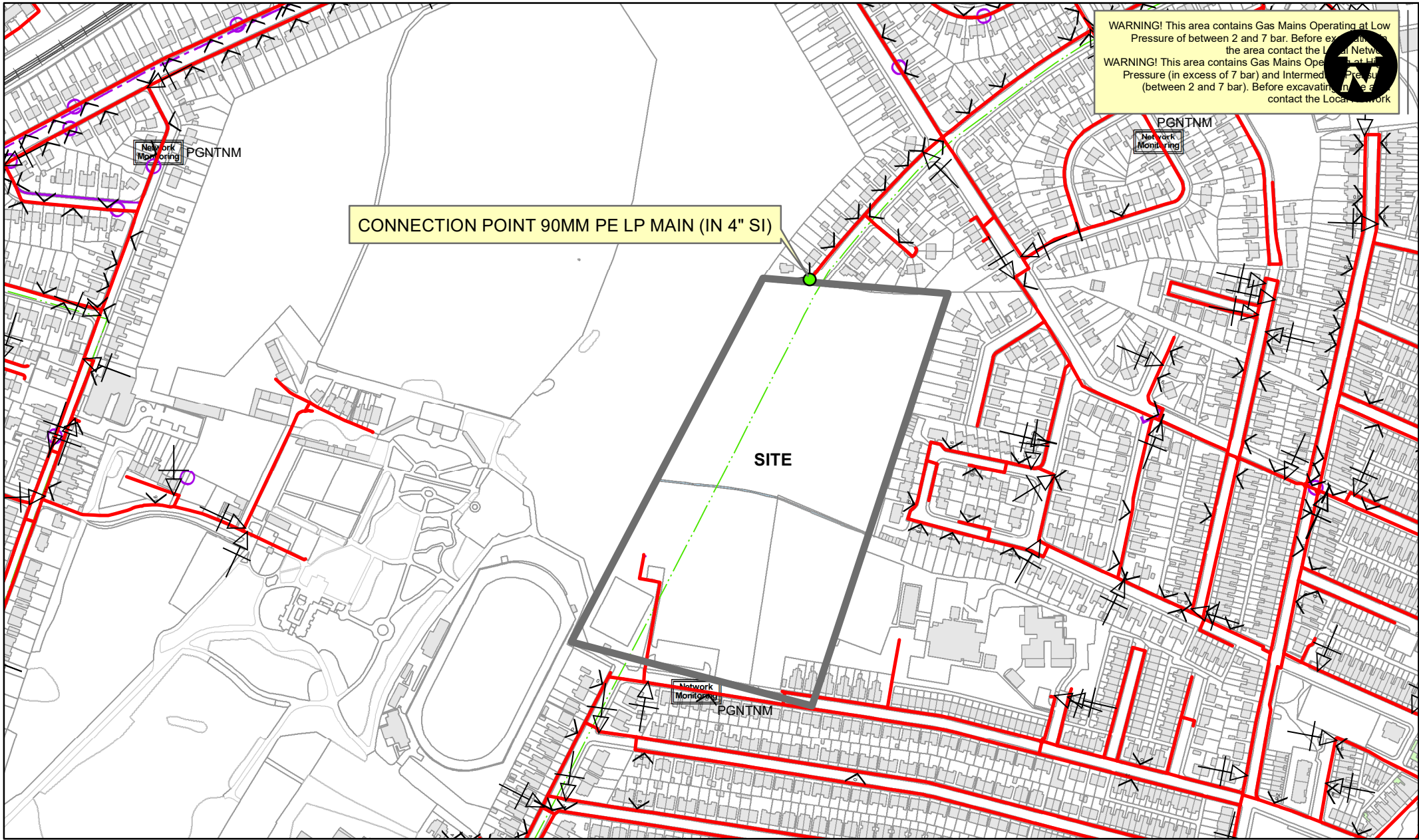
I trust this meets with your requirements at this stage. If you have any queries please do not hesitate to contact Performance and Support on the above number.

Yours sincerely,



Laura Cheshire





WARNING! This area contains Gas Mains Operating at Low Pressure of between 2 and 7 bar. Before excavating in the area contact the Local Network Operator.
 WARNING! This area contains Gas Mains Operating at High Pressure (in excess of 7 bar) and Intermediate Pressure (between 2 and 7 bar). Before excavating in the area contact the Local Network Operator.

CONNECTION POINT 90MM PE LP MAIN (IN 4" SI)

SITE

SCALE: 1:500 @ A4
 USER ID: james.mason
 DATE: 06-Feb-2020 10:28:18
 INTERNAL USE ONLY
 OS Ref: 381047, 394628
 CENTRE: <Centre>

L/P GAS MAIN
 M/P GAS MAIN
 I/P GAS MAIN
 H/P GAS MAIN
 N/H/P GAS MAIN
 PROPOSED PIPE - LP
 PROPOSED PIPE - MP
 PROPOSED PIPE - IP
 ABANDON - LP
 ABANDON - MP
 Out Of Standard Service



SCHEME: <NG GDFO Scheme Name>
 DESIGN: <NG GDFO Design Number>
 REVISION: <NG GDFO Revision>

This plan shows those pipes owned by Cadent in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and any other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Some examples of Plant Items:
 Valve Syphon Depth of Cover Change of Dia Change of Material

180012234



This plan is reproduced from or based on the OS map by Cadent Gas Limited, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved..

Network Enquiry No : 180012223
Your Reference : SOUTH END OF SITE

Cadent Gas Limited

National Gas Emergency Service - 0800 111 999* (24hrs)
*calls will be recorded and may be monitored

Mr David Ibbotson
Fuel Solutions
May Bank Business Centre
48 High Street
May Bank
Newcastle
ST5 0JB

Date : 10th February 2020
Contact : Performance and Support
Direct Tel : 0845 3666758
Email : networkdesign@cadentgas.com

www.cadentgas.com

Dear David,

Re: Land Enquiry for Proposed Development Site at NEW SUPPLY, RYEBANK ROAD, OLD TRAFFORD, MANCHESTER, M16 0HR.

Thank you for your enquiry which we received on 4th February 2020. I enclose details of Cadent Gas plant in the vicinity of your proposed supply.

The nearest main with sufficient capacity is 11 metres from the site boundary and it is a Low Pressure main.

This Developer Enquiry response is a reflection of the network at the time delivered and is not a guarantee of gas flow or capacity due to the changing dynamics of the gas distribution network. If you wish to secure capacity and connect to the network please submit quotation Connections Request via the official connections route allowing for further analysis to verify the capability of the network again.

Standard design pressures have been used. Refer to www.Cadentgas.com

Please be aware of existing mains or services within the site boundary that may require diversionary or abandonment works, this will be costed upon receipt of a firm request.

Plans attached: Yes

A copy of the Cadent Connections Charging Statement referenced in this letter can be found on Cadent's website:

<http://cadentgas.com/Get-connected>

If you require a printed version please contact us on the details provided above.

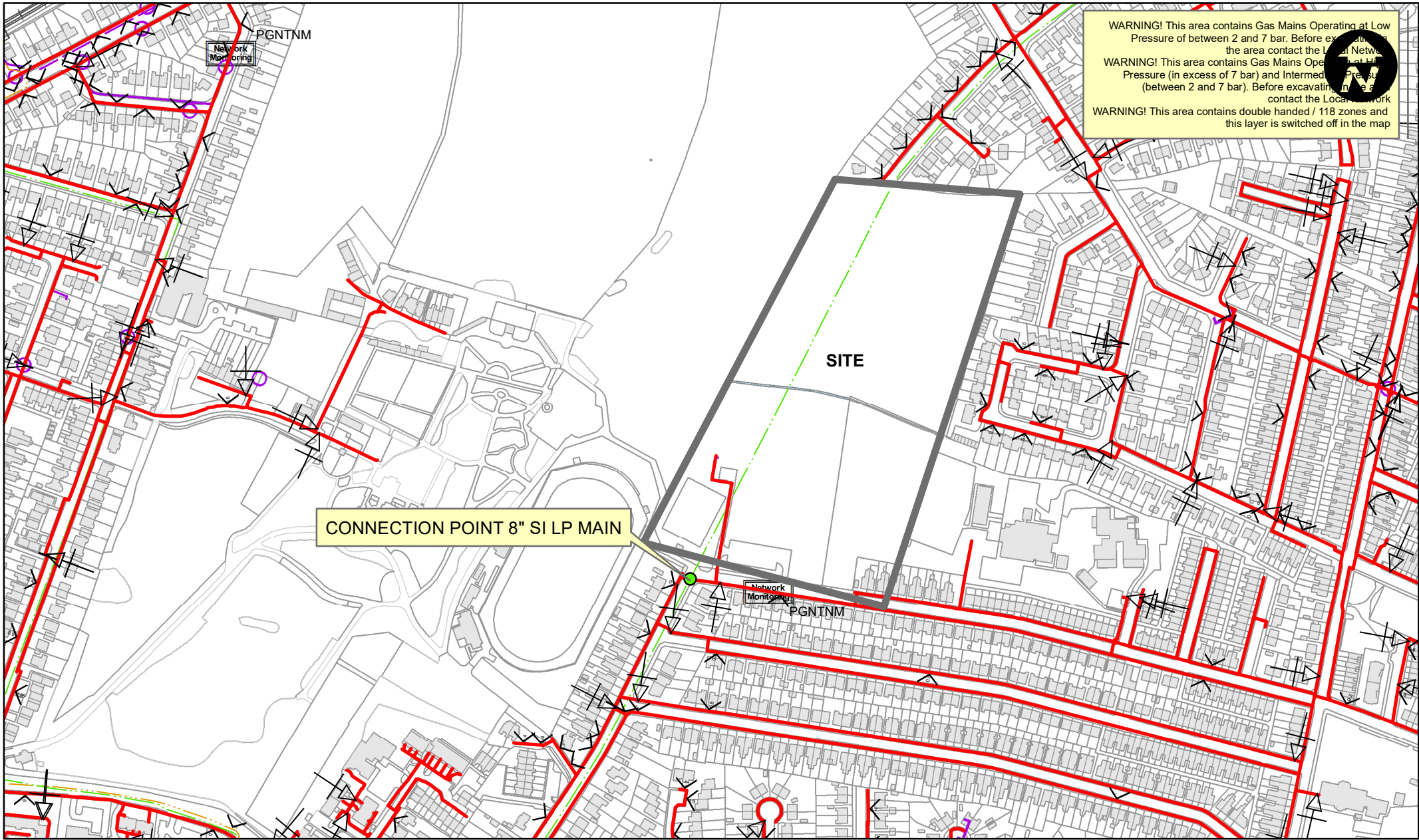
I trust this meets with your requirements at this stage. If you have any queries please do not hesitate to contact Performance and Support on the above number.

Yours sincerely,



Laura Cheshire





WARNING! This area contains Gas Mains Operating at Low Pressure of between 2 and 7 bar. Before excavating in the area contact the Local Network Controller.

WARNING! This area contains Gas Mains Operating at High Pressure (in excess of 7 bar) and Intermediate Pressure (between 2 and 7 bar). Before excavating in the area contact the Local Network Controller.

WARNING! This area contains double handed / 118 zones and this layer is switched off in the map

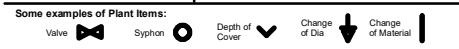
SCALE: 1:500 @ A4
 USER ID: james.mason
 DATE: 06-Feb-2020 10:45:53
 INTERNAL USE ONLY
 OS Ref: 380990, 394550
 CENTRE: <Centre>

L/P GAS MAIN
 M/P GAS MAIN
 I/P GAS MAIN
 H/P GAS MAIN
 N/H/P GAS MAIN
 PROPOSED PIPE - LP
 PROPOSED PIPE - MP
 PROPOSED PIPE - IP
 ABANDON - LP
 ABANDON - MP
 Out Of Standard Service



SCHEME: <NG GDFO Scheme Name>
 DESIGN: <NG GDFO Design Number>
 REVISION: <NG GDFO Revision>

This plan shows those pipes owned by Cadent in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and any other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.



180012223



This plan is reproduced from or based on the OS map by Cadent Gas Limited, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved..

Ms Vanessa Mowat
Harlaxton Engineering Services Ltd
Toll Bar Road
Marston
Grantham
NG32 2HT

Electricity North West
Frederick Road
Salford
M6 6QH
Web: www.enwl.co.uk

Our Ref: 5500168842/A

T: 0800-195-4141
DD: 08433114372
E: anne.thomson@enwl.co.uk

28 February 2020

Dear Ms Vanessa Mowat

Re: IDNO Point of Connection for Site 1 Land at Rybank Road, Old Trafford, Manchester, M16 0HR

Thank you for your recent enquiry requesting a quotation in relation to the above.

Our price for carrying out the statutory works, detailed in the project specification, is £7,165.09 plus VAT of £1,433.02 totalling £8,598.11.

The quotation is valid for a period of 180 days from the date of this letter. A detailed price breakdown can be found on the following pages.

The works and the assumptions made in calculating our price are based on your application and are detailed in the Project Specification. Please take time to read through and check these details and should you wish to make any amendments please notify us at the earliest opportunity.

The offer is subject to Electricity North West General Conditions of Contract and the Project Specification. A full copy of the Electricity North West Limited General Conditions of Contract (business) can be viewed at <http://www.enwl.co.uk/our-services/connection-services/help-faqs/terms-and-conditions>. If you are unable to access the internet please contact us on 0800 048 1820 and we will post a copy to you.

There is a new Competition in Connections Code of Practice that came into effect on the 30th October 2015. This party enables third party connectors to undertake more activities associated with a new connection. Further details can be found on our website.

To enable you to comply with the Construction (Design and Management) Regulations 2015, a full method statement will be provided to you once we acknowledge receipt of your signed Customer Acceptance Form. The statement will reflect the generic and site-specific risks and the working methods adopted by our appointed contractor for works undertaken on behalf of Electricity North West.

If you wish to proceed, please return the following by email to cic@enwl.co.uk or by post to the address above

- Completed Customer Acceptance Form.
- Payment for the full amount of the price stated including VAT at the appropriate rate by cheque payable to Electricity North West Limited or BACS / CHAPS transfer.
- Design Approval pack from a NERS accredited company.

We would like to thank you for your valued enquiry and look forward to working closely with you in due course. If you require any further assistance please do not hesitate to contact me.

Yours sincerely,



Anne Thomson
Electricity North West

Description of the works**The charges included are for POC charges:**

- Only nominal costs for legal consents have been included
- HV shutdown to commission substation.
- For additional bespoke information, please refer to the project specification.
- Assessment and Design

The charges do not include for:

- Land acquisition costs for legal consents etc
- Electricity North West HV &/or LV network energisation connection.
- Unidentified HV &/or LV infrastructure diversion works.
- Out of hours working.
- For additional bespoke information, please refer to the project specification.

Quotation price

The quotation price is provided based upon your application and the information you provided. The quotation only contains the non contestable charges associated with the new connection, this may include any contestable diversion and reinforcement costs.

Non Contestable Charges

If you require a full description of the non contestable charges these can be viewed on our website <http://www.enwl.co.uk/our-services/connection-services/help-faqs/useful-information/common-charging-methodology>. If you are unable to access the internet please contact us on 0800 048 1820 and we will post a copy to you.

Determinations

We hope you are satisfied with the service Electricity North West has provided and hope that any possible disputes have been resolved satisfactorily. However if a situation should arise and we are unable to reach a mutually acceptable solution, you can contact The Energy Ombudsman, who will assist in resolving the dispute. You can contact The Energy Ombudsman in writing to PO BOX 966, Warrington, WA4 9DF, by telephone on 0845 055 0760 or online at www.energy-ombudsman.org.uk

BREAKDOWN OF CHARGES

| Non Contestable Charges | | |
|--|-----------------|------------------|
| Connection Charges | Quantity | Charge |
| Assessment Charges | 1 | £2,990.00 |
| Design Charges | 1 | £1,310.00 |
| Operational Work | 1 | £1,104.00 |
| Legal - Ind/com Way/easement developer/3rd party | 1 | £1,090.00 |
| | | |
| Connections – Construction Work | | |
| Labels & Nameplates | 1 | £671.09 |
| Total Non Contestable Charge | | £7,165.09 |
| Total Charge | | £7,165.09 |

CUSTOMER ACCEPTANCE FORM

Customer: Harlaxton Engineering Services Ltd

Our Reference: 5500168842/A

Project title: IDNO Point of Connection for Site 1 Land at Rybank Road

Site address: Old Trafford, Manchester, M16 0HR

I accept your offer, dated 28 February 2020 for the works referenced above and any subsequent charges, as detailed in the project specification.

I agree to pay £7,165.09 plus VAT of £1,433.02 totalling £8,598.11 and payment for the full amount.

I acknowledge and agree that the works are subject to the Electricity North West General Conditions of Contract, a copy of which I have read.

I acknowledge that I must appoint an electricity supplier to the site before the connection/s can be made live.

The site will be ready for Electricity North West to commence works on _____ **(please enter date)**.

However I have read and understand clause 7 of the Electricity North West General Conditions of Contract, in relation to commencement of the works.

| | |
|---|--|
| Signature of customer or authorised signatory on behalf of customer: | |
| Date: | |
| SITE CONTACT DETAILS | |
| Contact Telephone Number: | |
| END USER DETAILS* | |
| Company/Customer Name: | |
| Customer Contact: | |
| Customer Telephone: | |
| Full Postal Address: | |
| Contact Name & Address (if different to site address): | |

* If there are multiple End Users, please provide additional details.

| |
|--|
| WAYLEAVE DETAILS (if different from End User)** |
|--|

| | |
|---------------------------------------|--|
| Name and Address of Landowner: | |
| Landowner Telephone: | |

** If there are multiple Landowners, please provide additional details.

Acceptance must include payment by cheque, made payable to Electricity North West Limited or by BACS/CHAPS in accordance with the guidance available on our website via the following ['link'](#)

If you are going to self approve your scheme design in line with the [Competition in Connections Code of Practice](#) please tick here (). The ENWL's user guide can be located on our [website](#)

POC PROJECT SPECIFICATION

Connections

A system study has now been carried out based on the information you provided:

Total load requirement of your connection is 250 kVA and consists of:

IDNO development of 80 properties.

No heat pumps or EV indicated.

Upon acceptance we will provide you with additional network data to facilitate an earthing study necessary for your design submission. You are advised to return your acceptance as soon as possible to ensure this data can be provided in a timely manner to meet your project timescales

HV Point of Connection 1

A Point of Connection has been identified on the High Voltage Network with a new substation to be looped in to an existing 6600V, 3c.03 AS cable using 3 x 1c300 SAC XLPE cable as shown on enclosed plan. The new substation to be located in a mutually agreed position.

Our quotation excludes all works from the point of connection to your interface.

This Point of Connection is valid for 180 days from the date of this quotation.

Offer Conditions

Application for a Point of Connection

- 1) The Point of Connection (POC) will be determined on the basis of the information on your application form and will not be guaranteed if any undeclared characteristics of the proposed load are found to cause electrical disturbances to the electricity network greater than those inferred on the original application form.
- 2) The IDNO is responsible for providing true and accurate load information to Electricity North West Limited.
- 3) All Connections for Embedded Distribution Networks shall comply with Electricity North West Limited ES 225.
 - Assessment & Design charges
 - Inspection Charges
 - Initial Energisation Cost*
 - Associated Diversion Work
 - Associated Reinforcement Work
 - Operation & maintenance charges (only if over and above the minimum cost scheme)
 - Costs for obtaining legal consents for the development

* The Initial Energisation Cost is for energisation of the installation at the POC only and will only be included in the offer if the network connection/s is a non-contestable joint/s or termination/s. It does not include for any on site non-contestable jointing work that may be requested following the initial energisation or for the energisation of any low voltage network if the POC was provided at high voltage.

- 2) The above charges become contractual on acceptance of the point of connection and will be included in the Electricity North West Limited 'Agreement to Adopt' contract which will be issued following design approval.
- 3) In certain circumstances diversion and reinforcement works are open to competition and are therefore classed as contestable (See Page 71, Section 6.12, Methodology and Charges for Connections Statement). If appropriate and if requested, a breakdown of the non-contestable elements for diversion and reinforcement costs may be supplied.

- 4) Indicative costs are given in Electricity North West Limited 'Statement of Methodology and Charges for Connection to the Electricity Distribution Network' which can be found on Electricity North West Limited web site: www.enwl.co.uk

Operational / Legal Consents

- 1) The Independent Connection Provider(ICP)/developer is legally responsible for and must make their own arrangements to obtain any legal consents to install or lay any electric line or cable on land owned by a third party. e.g. on privately owned land outside the development site. Electricity North West Limited will only obtain legal consents in so far as they are necessary or desirable for the operation of Electricity North West Limited network after asset adoption.

This will include any legal consents which the developer is required to grant for electric lines or cables within the development site which will be adopted by Electricity North West Limited. No electric lines or cables shall be installed in land not owned by the developer before agreement is reached with the landowner. This POC is, therefore, dependant on the ICP/developer being able to reach agreement with any third party landowner for any electric lines or cables, or any part thereof, which will be installed at or from the POC.

Please note that the date of energisation for the installation will not be arranged until all operational/legal consents have been completed with Electricity North West Limited.

- 2) Operational/Legal Consents include:

- Any easement, wayleave or licence required for any electric line or cable laid from the POC in private land which does not or will not form part of the public highway.
- Any lease or freehold transfer of land required for substations.
- Any Planning or statutory consent required in respect of any of the above.

- 3) The ICP/developer will be responsible for the cost of reinstating any damage to land not within the development site and for any for any costs associated with the acquisition of Operational/Legal Consents.

Health and Safety

- 1) The following information is given to assist you in maintaining safe working practices on the site:

Electricity North West Limited plans carry an endorsement stamp that is there for your safety. Before any machines are used, all of Electricity North West Limited underground assets should be located by manual excavation. All excavation should be done by taking the appropriate safety precautions in the 'Health and Safety Executive Guidance Note G47' 'Avoiding Danger from Underground Services'; taking cognisance of the fact that other plant may be in the vicinity which is not shown on the plans. Please ensure that the current issue of plans is referred to before commencing work on site.

Acceptance of Point of Connection

- 1) If you wish to accept the Point of Connection, a completed 'Acceptance' form with payment in full must be returned before the validity date expires. If your acceptance is not received before the expiry date then the available capacity on our network could be made available to subsequent applicants.
- 2) Your design submission must be submitted within 30 days of acceptance of the POC and must include the Design Submission Check List form. If your design is not received within the time stated then your acceptance will lapse and the point of connection could be allocated to another applicant without notice. Under exceptional circumstances you may apply in writing for a further 30 days extension. You will also be liable for any abortive costs incurred in failure to comply with the above.
- 3) These forms are an integral part of the design submission and the process of design approval will not start until they have been received. Any errors on the forms will also delay the start of the process.

- 4) Following design approval, Electricity North West Limited will issue the ICP with an 'Agreement to Adopt' contract. The ICP will then be responsible for obtaining all required signatures on the 'Agreement to Adopt'. Electricity North West Limited will not undertake any activities associated with the electricity connection works until this Agreement has been signed, this includes any audits of the work intended to be adopted. It should be noted that Electricity North West Limited will not adopt any new connections work that we have not had an opportunity to audit until we are satisfied that the installation meets Electricity North West Limited standards.

Generation

- 1) Unless it is included within your application, you must contact Electricity North West Limited if you intend to provide facilities to allow the export of electricity (including by means of CHP, solar cells, wind turbines etc) into the electricity distribution network or operate on site generation that interconnect with our supplies, including as a means of an emergency supply. We reserve the right to amend our price and programme of works in association with these facilities.

Non-Linear Loads (motors, welders and rectifiers)

- 1) Motors, Welders, and other equipment likely to affect the supplies to other consumers must not be connected without prior approval from Electricity North West Limited.
- 2) For all non-linear loads, it is your responsibility to ensure that the cumulative effect of any harmonic-generating equipment (e.g. Rectifiers, invertors & variable speed motor drives) complies with Industry Standards. If complaints are received from other customers connected to the Distribution System regarding supply disturbance and these can be directly attributed to your equipment, then Electricity North West Limited reserve the right to insist that you disconnect the offending equipment remedial action is taken by yourself, at your expense.

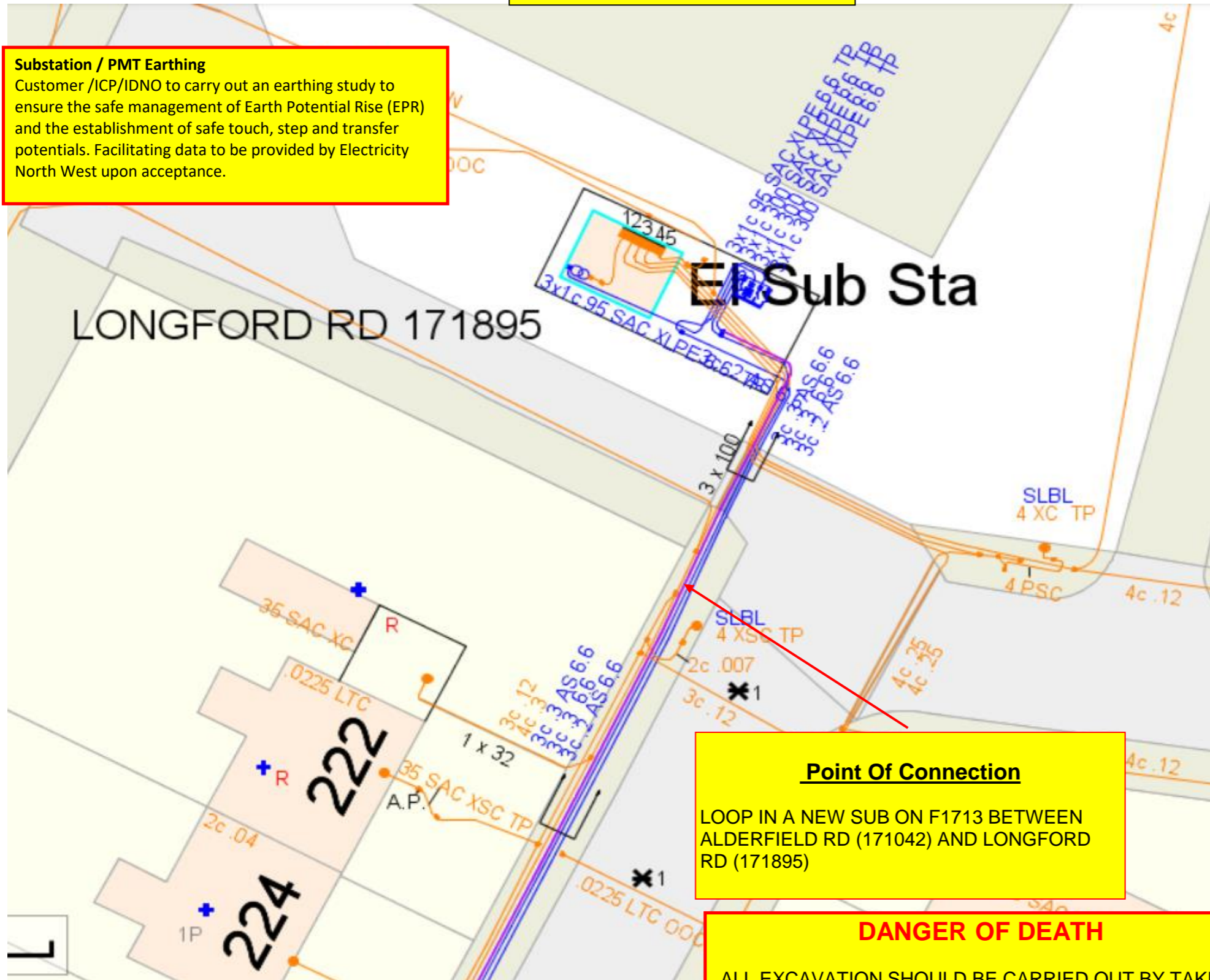
Disconnection

- 1) We have not included the costs for any existing service disconnection/s in our quotation. For all disconnections please contact Electricity North West Customer Service on 0800 048 1820.

For Planning Purpose Only

Substation / PMT Earthing

Customer /ICP/IDNO to carry out an earthing study to ensure the safe management of Earth Potential Rise (EPR) and the establishment of safe touch, step and transfer potentials. Facilitating data to be provided by Electricity North West upon acceptance.



Point Of Connection

LOOP IN A NEW SUB ON F1713 BETWEEN ALDERFIELD RD (171042) AND LONGFORD RD (171895)

DANGER OF DEATH

ALL EXCAVATION SHOULD BE CARRIED OUT BY TAKING THE APPROPRIATE SAFETY PRECAUTIONS IN THE HEALTH & SAFETY EXECUTIVE GUIDE (HSG47) "AVOIDING DANGER FROM UNDERGROUND SERVICES" AND (HSG6), "AVOIDING DANGER FROM OVERHEAD ELECTRICAL LINES". AT ALL TIMES TAKING INTO ACCOUNT THAT OTHER PLANT MAY BE IN THE VICINITY WHICH IS NOT SHOWN ON OUR PLANS.

"DANGER"
HIGH VOLTAGE CABLES PRESENT
EXPOSE ALL CABLES BEFORE
JOINTING

PROJECT DETAIL

Title: Site 1 Rybank Rd
 Address: Old Trafford, Manchester, M16 0HR
 Scheme Ref Number: 5500168842
 Drawn By: S Khan
 Date: 28-Feb-2020
 Grid Reference: (X) 380972 (Y) 394428
 Scale: N.T.S
Point of Connection Expiry Date:
 Valid for a period of 180 days from the date of the Quotation

POINT OF CONNECTION TECHNICAL DETAIL

Cable Size @ P.O.C : 3c 0.3 AS
 Voltage : 6600 Volts
 Minimum Cable Size : 300 TLX
 Loop or Teed (HV only) : Looped
 Primary/Feeder Name / No : Chorlton/ F1713
 Transformer Size : kVA
 Fuse Size : Amps
 Earth Loop Impedance : ohms
 % Voltage Drop
 1) Including site load : %
 2) excluding site Load : %
 Generation:
 Voltage Rise relative to primary BB : %
 Positive sequence R+JX (% on 100MVA base)

Notes :

For reference only



Other apparatus may also be present which is owned by a third party other than Electricity North West Limited. Reproduced from or based upon Ordnance Survey's map with permission of the controller of Her Majesty's Stationery Office. Crown Copyright Reserved. LICENCE No 100017892. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Reference should be made to HSE guidance HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines". Electricity North West Limited, registered number 2366949, registered in England and Wales, registered office: 304 Bridgewater Place, Birchwood Park, Warrington, WA3 6XG

Electricity North West
Frederick Road
Salford
M6 6QH
Web: www.enwl.co.uk

Ms Vanessa Mowat
Harlaxton Engineering Services Ltd
Toll Bar Road
Marston
Grantham
NG32 2HT

Our Ref: 5500168844/A

T: 0800-195-4141
DD: 08433114372
E: anne.thomson@enwl.co.uk

28 February 2020

Dear Ms Vanessa Mowat

Re: IDNO Point of Connection for Site 2 Land at Rybank Road, Old Trafford, Manchester, M21 9LJ

Thank you for your recent enquiry requesting a quotation in relation to the above.

Our price for carrying out the statutory works, detailed in the project specification, is £1,890.00 plus VAT of £378.00 totalling £2,268.00.

The quotation is valid for a period of 180 days from the date of this letter. A detailed price breakdown can be found on the following pages.

The works and the assumptions made in calculating our price are based on your application and are detailed in the Project Specification. Please take time to read through and check these details and should you wish to make any amendments please notify us at the earliest opportunity.

The offer is subject to Electricity North West General Conditions of Contract and the Project Specification. A full copy of the Electricity North West Limited General Conditions of Contract (business) can be viewed at <http://www.enwl.co.uk/our-services/connection-services/help-faqs/terms-and-conditions>. If you are unable to access the internet please contact us on 0800 048 1820 and we will post a copy to you.

There is a new Competition in Connections Code of Practice that came into effect on the 30th October 2015. This party enables third party connectors to undertake more activities associated with a new connection. Further details can be found on our website.

To enable you to comply with the Construction (Design and Management) Regulations 2015, a full method statement will be provided to you once we acknowledge receipt of your signed Customer Acceptance Form. The statement will reflect the generic and site-specific risks and the working methods adopted by our appointed contractor for works undertaken on behalf of Electricity North West.

If you wish to proceed, please return the following by email to cic@enwl.co.uk or by post to the address above

- Completed Customer Acceptance Form.
- Payment for the full amount of the price stated including VAT at the appropriate rate by cheque payable to Electricity North West Limited or BACS / CHAPS transfer.
- Design Approval pack from a NERS accredited company.

We would like to thank you for your valued enquiry and look forward to working closely with you in due course. If you require any further assistance please do not hesitate to contact me.

Yours sincerely,



Anne Thomson
Electricity North West

Description of the works**The charges included are for POC charges:**

- For additional bespoke information, please refer to the project specification.
- Assessment and Design

The charges do not include for:

- Land acquisition costs for legal consents etc
- Electricity North West HV &/or LV network energisation connection.
- Unidentified HV &/or LV infrastructure diversion works.
- For additional bespoke information, please refer to the project specification.

Quotation price

The quotation price is provided based upon your application and the information you provided. The quotation only contains the non contestable charges associated with the new connection, this may include any contestable diversion and reinforcement costs.

Non Contestable Charges

If you require a full description of the non contestable charges these can be viewed on our website <http://www.enwl.co.uk/our-services/connection-services/help-faqs/useful-information/common-charging-methodology>. If you are unable to access the internet please contact us on 0800 048 1820 and we will post a copy to you.

Determinations

We hope you are satisfied with the service Electricity North West has provided and hope that any possible disputes have been resolved satisfactorily. However if a situation should arise and we are unable to reach a mutually acceptable solution, you can contact The Energy Ombudsman, who will assist in resolving the dispute. You can contact The Energy Ombudsman in writing to PO BOX 966, Warrington, WA4 9DF, by telephone on 0845 055 0760 or online at www.energy-ombudsman.org.uk

BREAKDOWN OF CHARGES

| Non Contestable Charges | | |
|-------------------------------------|-----------------|------------------|
| Connection Charges | Quantity | Charge |
| Assessment Charges | 1 | £1,240.00 |
| Design Charges | 1 | £650.00 |
| Total Non Contestable Charge | | £1,890.00 |
| Total Charge | | £1,890.00 |

CUSTOMER ACCEPTANCE FORM

Customer: Harlaxton Engineering Services Ltd

Our Reference: 5500168844/A

Project title: IDNO Point of Connection for Site 2 Land at Rybank Road

Site address: Old Trafford, Manchester, M21 9LJ

I accept your offer, dated 28 February 2020 for the works referenced above and any subsequent charges, as detailed in the project specification.

I agree to pay £1,890.00 plus VAT of £378.00 totalling £2,268.00 and payment for the full amount.

I acknowledge and agree that the works are subject to the Electricity North West General Conditions of Contract, a copy of which I have read.

I acknowledge that I must appoint an electricity supplier to the site before the connection/s can be made live.

The site will be ready for Electricity North West to commence works on _____ **(please enter date)**.

However I have read and understand clause 7 of the Electricity North West General Conditions of Contract, in relation to commencement of the works.

| | |
|---|--|
| Signature of customer or authorised signatory on behalf of customer: | |
| Date: | |
| SITE CONTACT DETAILS | |
| Contact Telephone Number: | |
| END USER DETAILS* | |
| Company/Customer Name: | |
| Customer Contact: | |
| Customer Telephone: | |
| Full Postal Address: | |
| Contact Name & Address (if different to site address): | |

* If there are multiple End Users, please provide additional details.

| |
|--|
| WAYLEAVE DETAILS (if different from End User)** |
|--|

| | |
|---------------------------------------|--|
| Name and Address of Landowner: | |
| Landowner Telephone: | |

** If there are multiple Landowners, please provide additional details.

Acceptance must include payment by cheque, made payable to Electricity North West Limited or by BACS/CHAPS in accordance with the guidance available on our website via the following ['link'](#)

If you are going to self approve your scheme design in line with the [Competition in Connections Code of Practice](#) please tick here (). The ENWL's user guide can be located on our [website](#)

POC PROJECT SPECIFICATION

Connections

A system study has now been carried out based on the information you provided:

Total load requirement of your connection is 145 kVA and consists of:

IDNO development of 40 properties.

LV Point of Connection 1

A Point of Connection has been identified on the Electricity North West Limited Low Voltage Network to be taken from an existing 4c.2 cable as shown on the enclosed plan. The cable is supplied from Longford Rd Substation via a 500kVA transformer and 400 A fuses.

Percentage Volt Drop at POC = 0.66% (including the new load)

Percentage Volt Drop at POC = 0.17% (excluding the new load)

Earth Loop Impedance at POC = 0.018Ω

Our quotation excludes all works from the point of connection to your interface.

This Point of Connection is valid for 180 days from the date of this quotation.

Offer Conditions

Application for a Point of Connection

- 1) The Point of Connection (POC) will be determined on the basis of the information on your application form and will not be guaranteed if any undeclared characteristics of the proposed load are found to cause electrical disturbances to the electricity network greater than those inferred on the original application form.
- 2) The IDNO is responsible for providing true and accurate load information to Electricity North West Limited.
- 3) All Connections for Embedded Distribution Networks shall comply with Electricity North West Limited ES 225.
 - Assessment & Design charges
 - Inspection Charges
 - Initial Energisation Cost*
 - Associated Diversion Work
 - Associated Reinforcement Work
 - Operation & maintenance charges (only if over and above the minimum cost scheme)
 - Costs for obtaining legal consents for the development

* The Initial Energisation Cost is for energisation of the installation at the POC only and will only be included in the offer if the network connection/s is a non-contestable joint/s or termination/s. It does not include for any on site non-contestable jointing work that may be requested following the initial energisation or for the energisation of any low voltage network if the POC was provided at high voltage.

- 2) The above charges become contractual on acceptance of the point of connection and will be included in the Electricity North West Limited 'Agreement to Adopt' contract which will be issued following design approval.
- 3) In certain circumstances diversion and reinforcement works are open to competition and are therefore classed as contestable (See Page 71, Section 6.12, Methodology and Charges for Connections Statement). If appropriate and if requested, a breakdown of the non-contestable elements for diversion and reinforcement costs may be supplied.
- 4) Indicative costs are given in Electricity North West Limited 'Statement of Methodology and Charges for Connection to the Electricity Distribution Network' which can be found on Electricity North West Limited web site: www.enwl.co.uk

Operational / Legal Consents

- 1) The Independent Connection Provider(ICP)/developer is legally responsible for and must make their own arrangements to obtain any legal consents to install or lay any electric line or cable on land owned by a third party. e.g. on privately owned land outside the development site. Electricity North West Limited will only obtain legal consents in so far as they are necessary or desirable for the operation of Electricity North West Limited network after asset adoption.

This will include any legal consents which the developer is required to grant for electric lines or cables within the development site which will be adopted by Electricity North West Limited. No electric lines or cables shall be installed in land not owned by the developer before agreement is reached with the landowner. This POC is, therefore, dependant on the ICP/developer being able to reach agreement with any third party landowner for any electric lines or cables, or any part thereof, which will be installed at or from the POC.

Please note that the date of energisation for the installation will not be arranged until all operational/legal consents have been completed with Electricity North West Limited.

- 2) Operational/Legal Consents include:

- Any easement, wayleave or licence required for any electric line or cable laid from the POC in private land which does not or will not form part of the public highway.
- Any lease or freehold transfer of land required for substations.
- Any Planning or statutory consent required in respect of any of the above.

- 3) The ICP/developer will be responsible for the cost of reinstating any damage to land not within the development site and for any for any costs associated with the acquisition of Operational/Legal Consents.

Health and Safety

- 1) The following information is given to assist you in maintaining safe working practices on the site:

Electricity North West Limited plans carry an endorsement stamp that is there for your safety. Before any machines are used, all of Electricity North West Limited underground assets should be located by manual excavation. All excavation should be done by taking the appropriate safety precautions in the 'Health and Safety Executive Guidance Note G47' 'Avoiding Danger from Underground Services'; taking cognisance of the fact that other plant may be in the vicinity which is not shown on the plans. Please ensure that the current issue of plans is referred to before commencing work on site.

Acceptance of Point of Connection

- 1) If you wish to accept the Point of Connection, a completed 'Acceptance' form with payment in full must be returned before the validity date expires. If your acceptance is not received before the expiry date then the available capacity on our network could be made available to subsequent applicants.
- 2) Your design submission must be submitted within 30 days of acceptance of the POC and must include the Design Submission Check List form. If your design is not received within the time stated then your acceptance will lapse and the point of connection could be allocated to another applicant without notice. Under exceptional circumstances you may apply in writing for a further 30 days extension. You will also be liable for any abortive costs incurred in failure to comply with the above.
- 3) These forms are an integral part of the design submission and the process of design approval will not start until they have been received. Any errors on the forms will also delay the start of the process.

- 4) Following design approval, Electricity North West Limited will issue the ICP with an 'Agreement to Adopt' contract. The ICP will then be responsible for obtaining all required signatures on the 'Agreement to Adopt'. Electricity North West Limited will not undertake any activities associated with the electricity connection works until this Agreement has been signed, this includes any audits of the work intended to be adopted. It should be noted that Electricity North West Limited will not adopt any new connections work that we have not had an opportunity to audit until we are satisfied that the installation meets Electricity North West Limited standards.

Generation

- 1) Unless it is included within your application, you must contact Electricity North West Limited if you intend to provide facilities to allow the export of electricity (including by means of CHP, solar cells, wind turbines etc) into the electricity distribution network or operate on site generation that interconnect with our supplies, including as a means of an emergency supply. We reserve the right to amend our price and programme of works in association with these facilities.

Non-Linear Loads (motors, welders and rectifiers)

- 1) Motors, Welders, and other equipment likely to affect the supplies to other consumers must not be connected without prior approval from Electricity North West Limited.
- 2) For all non-linear loads, it is your responsibility to ensure that the cumulative effect of any harmonic-generating equipment (e.g. Rectifiers, invertors & variable speed motor drives) complies with Industry Standards. If complaints are received from other customers connected to the Distribution System regarding supply disturbance and these can be directly attributed to your equipment, then Electricity North West Limited reserve the right to insist that you disconnect the offending equipment remedial action is taken by yourself, at your expense.

Disconnection

- 1) We have not included the costs for any existing service disconnection/s in our quotation. For all disconnections please contact Electricity North West Customer Service on 0800 048 1820.

For Planning Purpose Only



PROJECT DETAIL

Title: Site 2 Land at Ryebank Rd

Address: Ryebank Rd, Old Trafford, Manchester, M21 9LJ

Scheme Ref Number: 5500168844

Drawn By: A Thomson

Date: 27-Feb-2020

Grid Reference: (X) 380985
(Y) 394433

Scale: N.T.S

Point of Connection Expiry Date:
Valid for a period of 180 days from the date of the Quotation

POINT OF CONNECTION TECHNICAL DETAIL

Cable Size @ P.O.C : 4c.2

Voltage : 240/415 Volts

Minimum Cable Size : 4c185 SAC XC

Loop or Teed (HV only)

Feeder Name / No :

Transformer Size : 500 kVA

Fuse Size : 400 Amps

Earth Loop Impedance : 0.018 ohms

% Voltage Drop

1) Including site load 0.66 %

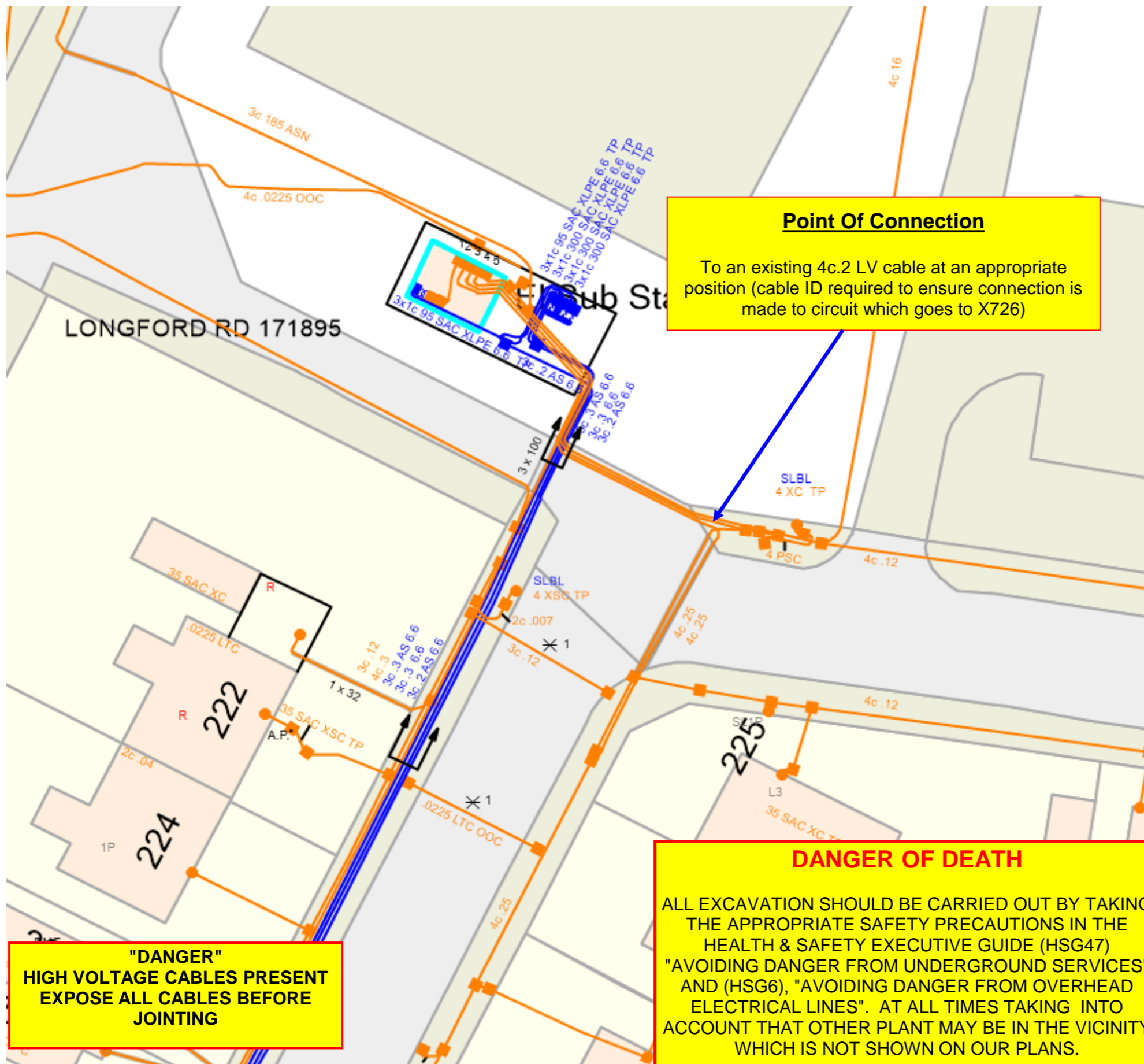
2) excluding site Load 0.17 %

Generation:

Voltage Rise relative to primary BB : %

Positive sequence R+JX (% on 100MVA base)

Notes :
For reference only



Point Of Connection
To an existing 4c.2 LV cable at an appropriate position (cable ID required to ensure connection is made to circuit which goes to X726)

"DANGER" HIGH VOLTAGE CABLES PRESENT EXPOSE ALL CABLES BEFORE JOINTING

DANGER OF DEATH
ALL EXCAVATION SHOULD BE CARRIED OUT BY TAKING THE APPROPRIATE SAFETY PRECAUTIONS IN THE HEALTH & SAFETY EXECUTIVE GUIDE (HSG47) "AVOIDING DANGER FROM UNDERGROUND SERVICES" AND (HSG6), "AVOIDING DANGER FROM OVERHEAD ELECTRICAL LINES". AT ALL TIMES TAKING INTO ACCOUNT THAT OTHER PLANT MAY BE IN THE VICINITY WHICH IS NOT SHOWN ON OUR PLANS.

This plan is issued by Electricity North West Limited. Unless otherwise indicated Electricity North West Limited cables are laid at depths in accordance with NJUG 2 (typically 450mm for Low Voltage & 600mm for 11KV cables in footpath). 33KV/132KV cables are laid at depths as marked. The depths and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However, third parties may have altered the surface level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from that shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated in the cable records.





Other apparatus may also be present which is owned by a third party other than Electricity North West Limited. Reproduced from or based upon Ordnance Survey's map with permission of the controller of Her Majesty's Stationery Office. Crown Copyright Reserved. LICENCE No 100017892. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Reference should be made to HSE guidance HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines". Electricity North West Limited, registered number 2366949, registered in England and Wales, registered office: 304 Bridgewater Place, Birchwood Park, Warrington, WA3 6XG

Your guidance for your Pre-development enquiry



Fuel Solutions (UK) Ltd
Parkfield Business Centre
Stafford
ST17 4AL

United Utilities Water Limited
Developer Services Water
Water Connections
Second Floor Grasmere House
Lingley Mere Business Park
Lingley Green Avenue
Warrington WA5 3LP

Telephone: 0345 072 6067

Email: developerserviceswater@uuplc.co.uk

FAO: David Ibbotson

Your Ref:

Our ref: **JAD/4100428548**

Date: **07.02.2020**

Dear Sir

Location: Ryebank Road, Chorlton-cum-Hardy, Manchester, M12 9LJ

Based upon the information provided in your recent enquiry, I am pleased to tell you that based on the current and anticipated demands, our clean water network is able to supply the likely requirements for your development.

Point of connection

The point of connection for the water supply to your development is along a section of the existing 125mm on Longford Road and the 6" on Rye Bank Road. Please connect between the two sites with a shut valve in between, as shown on the attached drawing.

Existing United Utilities water assets

To help plan your development I have enclosed a copy of our asset records. This shows that we have no operational assets within the boundaries of your proposed development. However, our network maybe affected at the proposed site entrances depending on the proposed lines and levels to the existing road surface.

Regarding the existing water mains surrounding your development, you must establish the true position of these water mains, the lines and levels should be plotted onto your proposed layout, and a copy of the plan should then be sent to this office for my attention for approval. Please note, that if damage does occur as a result of your works, the repair/replacement of the mains network/surface boxes will be fully rechargeable to yourselves.

Please Note: There are large diameter trunk mains (54", 24" & 40") present within your working area as shown on the attached plan. You must comply with our standard conditions for work carried out on or when crossing, LTDM's, aqueducts and easements. (Copy attached)

Additional

It is the responsibility of the developer to arrange for the disconnection of the existing services to site.

Note billing only accepts written requests to email: customer.services@uuplc.co.uk

You will need to attach the bill and the request to disconnect and confirm if the property was domestic or commercial.

Important note

This copy of our asset records is only provided to help you assess the likely risks when planning your development at a desk top stage. It is not intended to be used for planning any actual excavation or construction work. You are reminded that a Health and Safety plan should include an up to date record of all underground equipment.

Infrastructure Charges

Based on the information you have provided we would advise you to allow a budget of £765.00 per plot for water and wastewater infrastructure charges for the planned (120) new connections. At present this charge is outside the scope of VAT.

Infrastructure Credits

We have no record of any water or sewerage connections to previous premises on this site within the last 5 years. This means that we are unable to offer any infrastructure credits against new connections on your proposed development.

What to do next:

If you decide to proceed with your development, you can choose between requisitioning your new clean water directly from us, or you can employ a contractor directly to self-lay the new mains. A list of approved installers is available at Lloyds Register www.lr.org. If your development will be using water for domestic purposes we will often provide an allowance in respect of future water use toward the cost of your new main, this allowance is the same no matter who you choose to lay your development main.

We have a booklet "Obtaining water supplies for new developments - Guidance notes for developers" which is available on request or can be downloaded from our website unitedutilities.com. This document contains information to help you make the right choice for your new water main or water connection.

The information given is valid for up to 6 months, if you need any further information or assistance, please do not hesitate to contact me at this office.

Please do not hesitate to contact us should you need further assistance 0345 072 6067 or email to Developerserviceswater@uuplc.co.uk, always using our reference number provided on this letter.

Yours faithfully

Jillian Doney
Project Design Engineer - East

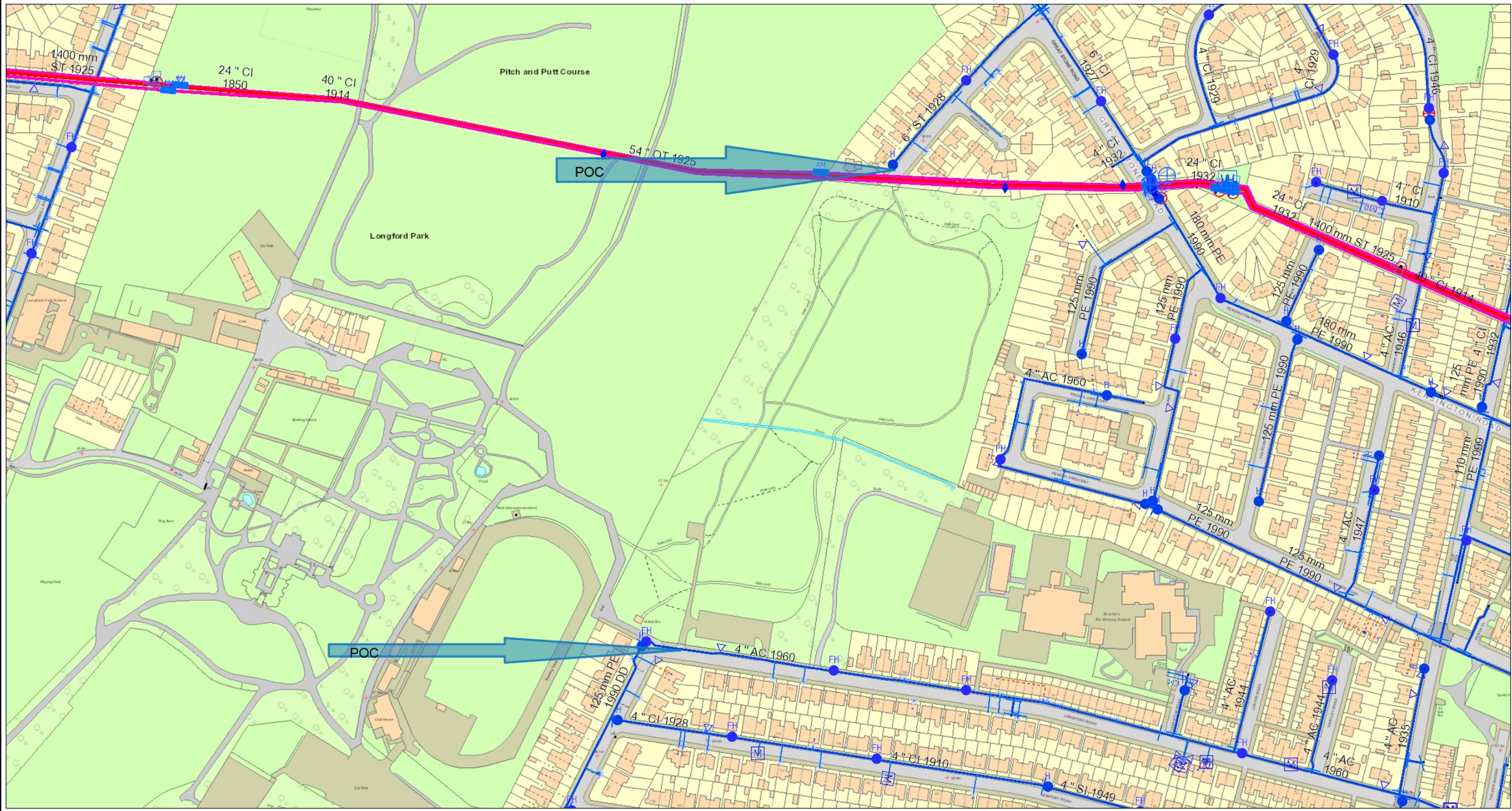
Enc. UU assets plan, General Conditions and Precautions Leaflet

Water Industry Act Section 47(3) Counter Notice

Please note that in accordance with Section 47(3) of the Water Industry Act 1991, United Utilities Water requires compliance with the conditions below, prior to the connection of any service connection to any of United Utilities Water's mains that form part of your requisition application.

- Advance security may be required to be lodged with United Utilities Water equal to the total value of any connections and associated ancillary works. We will in due course estimate the cost of these works and provide you with the value of any security that may be required.
- Premises under separate occupation must be supplied by separate individual service pipes.
- Where it is deemed appropriate by United Utilities Water, a meter will be installed to determine the volumetric charge for the supply of water which can be connected by our contractor or by an approved third party in accordance with United Utilities Water's specification.
- Laying of the service pipe to a depth of no less than 750mm and no more than 1350mm below finished ground level, within the private land from the Street boundary into your premises. Service pipes must be installed to United Utilities Water's current specifications, and have a stopcock fitted. Standard connections (up to 25mm OD) shall consist of an un-jointed appropriate type and construction of pipe with marker tape laid no more than 400mm below finished ground level. Provision for volumetric metering must be installed fully in accordance with United Utilities Water's current specifications.
- If you are installing new plumbing or making alterations to existing internal plumbing arrangements, you must ensure that the plumbing complies with the Water Supply (Water Fittings) Regulations 1999 and with United Utilities Water's specification for the purposes of ensuring it will be reasonably practicable to install and connect a meter.
- Where your development or property requires water to be delivered at a height greater than 10.5 metres below the draw off point of the reservoir or tower supplying the area it is a requirement, in accordance with Section 66 of the Water Industry Act 1991, that you install a cold water storage cistern to cover twenty-four hours demand.
- Any outstanding charges payable as a result of a disconnection notice or any charges payable for any outstanding compliance requirement from any Section 75 notice that has been served (waste, contamination or misuse) have been paid in full.

In addition to the statutory conditions above, if you have yet to provide us with a full postal address for the property/s to be connected, please remember that we will need this information before we can make any service connection/s. If you have not yet obtained or agreed this information with your local planning authority, we strongly recommend that you contact your planning representative as soon as possible to prevent your connection being delayed later on in the process.



The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

Water pre-development enquiry

Getting water for your new development
initial planning stage



This enquiry is intended to be used when you are at initial planning stage. If you are at detailed planning stage and your development is ready for new water supplies then please submit either a requisition or self lay application.

We publish a booklet **“Obtaining water supplies for new developments - Guidance notes for developers”**, which is available on our website unitedutilities.com or by request from **0345 072 6067**, which will help you decide which option is best suited to your needs.

If your enquiry is for a development of up to 500 domestic dwellings we aim to provide a reply within 21 calendar days of receiving your completed application. For larger enquiries and those with non-domestic water demand, we may need additional time to consider your enquiry. If this happens, we will contact you within 14 calendar days with an alternative reply date

We don't make an application charge for this enquiry if the development will use water primarily for domestic purposes. If the development will use water for non-domestic purposes (e.g. a factory or industrial process) we will confirm our application charge 7 calendar days after receipt of your application. You will need to make this payment before we can process your application!

Once completed please return this form, by e-mail to DeveloperServicesWater@uuplc.co.uk, by fax to **01925 677973** or by post to United Utilities Water, Developer Services, Windermere House, Lingley Mere, Warrington WA5 3LP. If you need help or assistance please call us on **0345 072 6067**.

| Section 1: About you | | | | | | | | | | | | | | |
|--|------------------------------------|----------------|---------------------------|---------------|-------------|----------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Your name | | | | | | | | | | | | | | |
| Your company's name | | | | | | | | | | | | | | |
| Your contact address (including postcode) | | | | | | | | | | | | | | |
| Daytime telephone number (a mobile number is fine) | | | | | | | | | | | | | | |
| Email | | | | | | | | | | | | | | |
| Section 2: About the development location | | | | | | | | | | | | | | |
| Site Address (or nearest main road) | | | | | | | | | | | | | | |
| Site grid reference (mid point) | | | | | | | | | | | | | | |
| Development area (hectares) | | Residential | | ha | Commercial | | ha | Industrial | | ha | | | | |
| Planning permission reference no. | | | | | | Date issued | <input type="text" value="D"/> | <input type="text" value="D"/> | <input type="text" value="M"/> | <input type="text" value="M"/> | <input type="text" value="Y"/> | <input type="text" value="Y"/> | <input type="text" value="Y"/> | <input type="text" value="Y"/> |
| Section 3: Details of your development | | | | | | | | | | | | | | |
| Household premises | | | | | | | | | | | | | | |
| Total number of dwellings needing a water supply | | | | | | | | | | | | | | |
| Expected construction period (until all dwellings are constructed) | | | | | Years | | Months | | | | | | | |
| Non household premises | | | | | | | | | | | | | | |
| Plot number | Building type number *see below | Floor space m2 | Volume required m3/day | Flow rate l/s | | | Anticipated connection date | | | | | | | |
| | | | | Max | Mean | Min | | | | | | | | |
| | | | | | | | <input type="text" value="M"/> | <input type="text" value="M"/> | <input type="text" value="Y"/> | <input type="text" value="Y"/> | | | | |
| | | | | | | | <input type="text" value="M"/> | <input type="text" value="M"/> | <input type="text" value="Y"/> | <input type="text" value="Y"/> | | | | |
| | | | | | | | <input type="text" value="M"/> | <input type="text" value="M"/> | <input type="text" value="Y"/> | <input type="text" value="Y"/> | | | | |
| | | | | | | | <input type="text" value="M"/> | <input type="text" value="M"/> | <input type="text" value="Y"/> | <input type="text" value="Y"/> | | | | |
| Total | | | | | | | | | | | | | | |
| Non household building types | | | | | | | | | | | | | | |
| Building type | Type number | Building type | Type number | Building type | Type number | Building type | Type number | Building type | Type number | | | | | |
| School | 1 | Retail store | 3 | Nursing home | 5 | Hotel/pub | 7 | Factory | 9 | | | | | |
| University | 2 | Office | 4 | Hospital | 6 | Leisure centre | 8 | Unspecified | 10 | | | | | |

Section 4: Current land use (please indicate the status of all parts of the land)

| | | |
|---|--|----|
| Greenfield land (land that has never been developed) | | ha |
| Residential brownfield land (land that has been previously developed for residential purposes) | | ha |
| Non residential brownfield land (land that has been, or is currently, in use for non-residential purposes) | | ha |

Section 5: Infrastructure Credits

Has the site being developed had a water supply in the last 5 years? Yes* No

*If yes please provide the following details, this will help us to give you the value of and duration of infrastructure credits available

Previous household supplies

| | |
|-----------------------------------|--|
| Number of connections on the site | |
| Approximate date of disconnection | |

Previous non-household supplies

| | |
|-----------------------------------|--|
| Number of connections on the site | |
| Approximate date of disconnection | |
| Type of premises | |
| Number of employees on site | |

Section 6: Have you included all your supporting information?

Site location plan: an Ordnance Survey (at 1:2500) is the ideal drawing Yes No

If available a site layout plan: Yes No

Section 7: Declaration

By submitting this application I confirm that:

- I have provided all the information requested, and
- I agree that United Utilities may use the supporting information provided for any purpose connected with this application

| | | | |
|-----------|--|--------------|---|
| Name | | Company | |
| Position | | Date | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |
| Telephone | | Mobile phone | |

When can I expect to get my reply?

- For developments up to 500 dwellings we expect to reply within 21 calendar days
- For developments larger than 500 dwellings or where there is a requirement for non-domestic water (e.g. for factories or industrial use), we may need to carry out investigation work, if this happens we will contact you within 14 calendar days of your application with a firm date when your reply will be ready
- We will always contact you within 5 calendar days of receiving your application to confirm we have all the information we need or to ask you for any additional information that we may need

Charges

We don't make an application charge for providing a point of connection if the site will use water for domestic purposes only.

If your site will use water for non-domestic purposes (e.g. a factory or industrial process), we will confirm our application charge 5 working days after receipt of your application. You will need to make this payment before the point of connection can be provided to you.

UU use only

| | | | |
|----------------------|---|---------------------|--|
| Acknowledgement date | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | Complete | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| SIR date out | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | SIR date return | |
| Acknowledgement | <input type="checkbox"/> Yes <input type="checkbox"/> No | Notification number | |
| Agreed reply date | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | | |



About us

United Utilities is the North West's water company. We keep the taps flowing and toilets flushing for seven million customers every day. From Crewe to Carlisle, we work hard behind the scenes to help your life flow smoothly.

United Utilities Water Limited, Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Warrington WA5 3LP. Registered in England and Wales. Registered Number 2366678.

Important information: Please read carefully



General conditions and precautions to be taken when carrying out work adjacent to United Utilities water distribution apparatus.

These general conditions and precautions apply to the water distribution system of United Utilities.

1. On request United Utilities will give approximate locations of mains according to our records. These records do not normally show the positions of service pipes from the mains to properties nor are they necessarily accurate or complete. No person or company shall be relieved from liability for damage caused by reason of the actual positions and/or depths being different from those shown on the plan. Any special requirements relative to our plant will be indicated. United Utilities employees will visit any site at reasonable notice to assist in the location of water plant and advise any precautions that may be required to obviate any damage.
2. In order to achieve safe working conditions adjacent to any apparatus the following should be observed:
 - (a) All water apparatus should be located by hand digging prior to the use of mechanical excavation.
 - (b) During construction work where heavy plant may have to cross the line of a water main, and the main is not under a carriageway of adequate standard of construction crossing points should be suitably reinforced with sleepers, steel plates or a specially constructed R.C. raft as necessary. These crossing points should be clearly indicated and crossing the line of the water main at other places should be prevented. United Utilities employees will advise on the type of reinforcement necessary. This is particularly important on agricultural or open land, where tiling or erosion may have reduced significantly the original cover.
 - (c) No explosive to be used within 32 meters of any United Utilities water pipe without prior consultation with United Utilities.
 - (d) Where it is proposed to carry out piling within 15 metres of any pipe United Utilities should be consulted so that affected pipes may be surveyed.
3. (a) Where excavation of trenches adjacent to any pipe affects its support, the pipe must be supported to the satisfaction of United Utilities.
(b) Where a trench is excavated crossing or parallel to the line of the pipe, the backfill should be adequately compacted to prevent any settlement which could subsequently cause damage to the main. In special cases it may be necessary to provide permanent support to a pipe which has been exposed over the length of the excavation before backfilling and reinstatement is carried out. There should be no concrete backfilling contact with the pipe.
4. No apparatus should be laid over and along the line of a water pipe irrespective of clearance. A minimum clearance of 450 millimetres should be allowed between any plant being installed and an existing pipe, to facilitate repair, whether the adjacent plant be parallel to or crossing the water pipe. No manhole or chambers shall be built over or round a pipe.
5. Where a United Utilities pipe is coated with special wrapping and is damaged, even to a minor extent, United Utilities must be notified, leaving the trench open for ready access so that repairs can be made. In case of any material damage to the pipe itself causing leakage, or weakening of the mechanical strength of the pipe, the necessary remedial work will be charged.
6. If leakage is caused by a contractor or sub-contractor, inform the relevant United Utilities office.
7. Where proposals involve changing existing levels over our mains you will need to inform us. We will need specific locations to be identified together with precise details as to the magnitude of the proposed changes to existing ground levels. Changes to existing levels may require the diversion of our apparatus for which you will be charged. However, in certain circumstances we may wish to leave our apparatus where it is. On these occasions you will usually be required to protect our apparatus by means of a concrete raft and ensure that any surface boxes affected are either raised or lowered by yourselves. Under no circumstances should our surface boxes be either buried or left in a situation where they are raised above finished ground levels.
If any damage to our apparatus occurs as a result of your works, repairs will be fully rechargeable to yourselves.
8. Where proposals involve resurfacing United Utilities must be notified if your excavation will be greater than 750mm in the highway and 300mm in a footpath, verge or other location.

Tree planting restrictions over water mains

Set out below are recommendations for tree planting in close proximity to water mains.

1. Both poplar and willow trees have extensive root systems and should not be planted within 10 metres of the water main.
2. The following trees and those of similar size, be they deciduous or evergreen, should not be planted within six metres of the pipeline eg ash, beech, birch, most conifers, elm, horse chestnut, lime, oak, sycamore, etc. Apple and pear trees also come into this category.
3. Bearing in mind that employees must have a clear path to conduct surveys, we recommend that no shrubs or bushes should be planted within one metre of the centre line of the pipeline.
4. There are bound to be cases where both the company and landowners wish to plant shrubs/ bushes in close proximity to the water main for screening purposes. We would suggest that the following which are shallow rooting are suitable for this purpose: blackthorn, broom, cotoneaster, elder, hazel, laurel privet, quickthorn, snowberry and most ornamental flowering shrubs.
5. In areas where soft fruit is grown, we see no reason why blackcurrant, raspberries, gooseberries, should not be planted on the easement, providing that a path is left clear for the surveys.

About us

United Utilities is the North West's water company. We keep the taps flowing and toilets flushing for seven million customers every day. From Crewe to Carlisle, we work hard behind the scenes to help your life flow smoothly.

United Utilities Water Limited, Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Warrington WA5 3LP.
Registered in England and Wales. Registered Number 2366678.

APPENDIX 6

Harlaxton Budget Quotation

Our ref no: HES/8140/SW/GS/MU Budget – Rev A

Date: 28 February 2020

FAO Dave Ibbotson
Fuel Solutions
Parkfield Business Centre
Park Street
Stafford
ST17 4AL

120 Unit Development at North & South Sites - Rybank Road, Old Trafford, Chorlton-Cum-Hardy, Manchester, M21 9LJ

Dear Dave,

I have the pleasure in submitting the following budget quotation for utility infrastructure installation at your development:

| | |
|--------------------|------------------------------|
| Gas | 120 units (mains & services) |
| Electricity | 120 units (mains & services) |
| Water | 120 units (mains & services) |

| | |
|--|-----------------------------|
| GRAND TOTAL | £266, 855.00 ex. VAT |
| North Site – Assumed HV, 80 plots including sub-station | £153, 000.00 ex. VAT |
| Additional HV cable costs from POC | £45, 855.00 ex VAT |
| South Site – Assumed LV, 40 plots | £68, 000.00 ex. VAT |

Please note: - Budget costs exclude ENW electricity non-contestable POC costs and any reinforcement costs and assume POC's are at the site entrances. The gas and water budget costs exclude all infrastructure & any reinforcement costs and assume sufficient capacities are at the site entrances. Water costs are based on a self-lay offer and design from United Utilities and obtained by client.

Please see below for a detailed outline of our proposal, along with next steps to place your order. If you have any questions, feel free to get in touch.

Yours Sincerely,

Steve Woodcock
Senior Business Development Manager
Mobile 07918 136571
steve@harlaxton.com



VAT Number: 705919914
Registered Address: Toll Bar Road, Marston,
Grantham, Lincs, NG32 2HT
Registered in England and Wales: No. 3491492
Directors: R C Hibbert, J E Hibbert, L J Mair

(2)

Optional Extras:

| | |
|---|-------------------|
| | |
| Substation GRP Housing (Supply and Install) | £4, 871.00 |
| Electric Recessed Meter Boxes & Hockey Sticks 120 Meter Boxes @ £30.49 | £3, 658.80 |
| Gas Recessed Meter Boxes 120 Meter Boxes @ £36.12 | £4, 334.40 |
| | |

Harlaxton Engineering Services Quotation

Contents

| | |
|---|-------------------------------------|
| 1. Project Specifics | 4 |
| 1.1 Description of Works..... | 4 |
| 1.2 Specified Project Information..... | 4 |
| 1.3 Lead Time..... | 6 |
| 2. Inclusions and Exclusions | 6 |
| 2.1 Legal Requirements and Charges..... | 8 |
| 2.2 Standard Assumptions..... | 8 |
| 2.3 Design Approval | 8 |
| 2.4 Payment Schedule..... | Error! Bookmark not defined. |
| 3. Design Proforma | 8 |
| 4. Acceptance of the Quote | 9 |
| 5. Official Acceptance..... | Error! Bookmark not defined. |

1. Project Specifics

We offer to obtain design approval, construct, and complete the on and off-site works as detailed herein. This offer includes for the installation to be constructed to the current published network operator gas, water & electricity technical specifications, and is subject to our design being approved by them. We would advise that every effort has been made to comply with your specified requirements, using manufacturer’s standard equipment where possible to provide an economical engineering solution.

1.1 Description of Works

Brief description of works: -

Make **assumed** LV (South Site) and **assumed** HV (North Site) POC’s onto existing ENW cable at **assumed location** at site entrance bringing new mains onto site / to onsite substation position. **ENW non-contestable costs are excluded.**

- Supply, install and commission a 500KVA **substation, location to be agreed with ENW**
- Make LP CSEP connection onto existing Cadent gas main, **assumed location** at site entrance bringing new mains to site
- **United Utilities** will make the offsite source of water connection and bring new mains to the site entrance based on a self-lay agreement sourced by Fuel Solutions with UU.
- Install IDNO LV network, IGT LP gas & non-contaminated water mains throughout site
- Make live onsite mains including test & commissioning
- Connect services to each meter location, providing a live electric, gas, and water supply
- Full scheme designs and the relevant approvals
- **Additional HV cable costs from HV POC are based on connection to cables between Longford Rd and Alderfield Road and assuming site sub-station is 250m from connection point (total 500m looped cable) and assuming 30m of highway excavation – Additional cost is £45, 855 ex vat.**
- **Budget quote assumes access to Site 1 is through Site 2 for HV cables and all land is owned by same land owner. Any 3rd party legal fees are client responsibility.**
- **Budget quote assumes Longford Rd sub-station is in public highway and not in private land. Any 3rd party legal fees are client responsibility.**

1.2 Specified Project Information

This quotation includes for the project management, supply, delivery and installation of the following:

Mains route is based upon the attached Indicative Route Plan.

Enquiry: Email from Dave Ibbotson dated 4th February 2020

Site Plan: **Indicative location plan**

Water - To be applied for by Fuel Solutions

| | |
|---|--|
| Gas 120 x domestic connections | Harlaxton Engineering Services will carry out the CSEP connection onto Cadent existing gas main. |
| | We will supply and install all main and service pipework from CSEP through to meter position. |

(5)

| | |
|--|---|
| | We will design the network and gain all necessary approvals prior to commencement of works. |
| | |
| | Energy Supplier to supply and install all domestic gas meters – To be arranged by client |

| | |
|---|--|
| Electricity 120 x domestic connections | Main CNE/HV feeder cable to POC and connection to existing ENW network. |
| | Harlaxton Engineering Services will supply, install, and commission a 500VA substation for North site only. |
| | Harlaxton Engineering Services will undertake all associated earthing. We have assumed a cold earthing arrangement. |
| | We will supply and install all main and service cable from POC through to the meter position. |
| | Electricity designs and relevant network approvals. Electricity meters to be called off by client to chosen energy supplier |

| | |
|---|--|
| Water 120 x domestic connections | The final cost is subject to the water design issued by United Utilities (UU). |
| | The water application and design needs to be relative to a self-lay offer |
| | Offsite main works will be carried out by UU. We will liaise with UU to facilitate the connection onto the existing mains. The timescales for these connections are detailed in the quotation/offer you have received from UU. |
| | Harlaxton Engineering Services will complete all installations from the main to the boundary box. Client to install water supply pipework from each individual unit up to the boundary box. |
| | We have costed for standard HPPE pipework. If any barrier pipework or any other non-standard requirements are needed these will be recharged accordingly. |

(6)

| | |
|--|--|
| | Water mains are to be tested and commissioned once per phase. There will be additional charges for split installation. |
|--|--|

1.3 Lead Time

Lead time is 8-10 **weeks from pre-start meeting on site arranged** with a member of Harlaxton Engineering Services operations team. A pre-start meeting is instigated by a call off to Harlaxton Engineering Services operations team (connectionrequests@harlaxton.com) by **Fuel Solutions**, once the below criteria have been met:

We anticipate that it will take **4 to 6 weeks** for the below criteria to be met.

- Successful contract agreement and payment in full as per the payment terms
- Legal Process has been commenced and is proceeding
- Full design approval from the relevant network operators

2. Inclusions and Exclusions

- This quote has not allowed for any onsite generation, if there will be onsite generation then there will be additional applications and a requote required.
- If ENW change their reinforcement costs then the balance will be due by **client** once any changes become known; we have not included any diversion costs in this scheme other than those stated.
- This quote has not made allowances for any electric network reinforcement or diversion works
- This quote has not allowed or included for any electric vehicle (EV) charging points, if these will be required then there will be an additional application and a requote required.
- No upstream diversion, infrastructure or reinforcement works/costs for water installation are included in this quotation unless specifically detailed. If UU advise of charges then these will be invoiced accordingly.
- Gas reinforcement costs have not been included for within this quotation, should Cadent change their reinforcement charges any further costs will be forwarded on to **Fuel Solutions**.

| <u>General</u> | <u>Harlaxton</u> | <u>Developer</u> |
|---|------------------|------------------|
| Offsite excavation & reinstatement | ✓ | |
| Offsite supply and install of sand, stone, hardcore, and tipping arrangements | ✓ | |
| Onsite mains excavated pre-sanded stepped multi-utility trench; sanded, backfill & reinstatement to tape level | | ✓ |
| Onsite installation of mains, cables and pipes to include installation of 10mm draw ropes | ✓ | |

(7)

| | | |
|---|---|---|
| Onsite supply and install of sand, stone, hardcore, and tipping arrangements | | ✓ |
| On-site excavation and backfill of service connection holes – soft dig only | | ✓ |
| Mains marker tape (excluding road crossings) | ✓ | |
| Supply of service marker tape | ✓ | |
| <u>Electric</u> | | |
| Substation plinth excavation, shuttering, ducting, & construct to {Harlaxton Energy Networks} specification | | ✓ |
| Supply of electric service ducting | ✓ | |
| Electric meter call-off to supplier | | ✓ |
| Electric meter box & hockey stick supply | | ✓ |
| Onsite electric mains ducting (excluding road crossings) including installation of 10mm draw ropes | | ✓ |
| <u>Gas</u> | | |
| | | |
| Supply of gas service pipe | ✓ | |
| Supply of gas service ducting | | ✓ |
| Gas meter call-off to supplier | | ✓ |
| Gas meter box supply | | ✓ |

| <u>Water</u> | <u>Harlaxton</u> | <u>Water Authority</u> | <u>Developer</u> |
|--|------------------|------------------------|------------------|
| Self-Lay Water Application | | | ✓ |
| Self-Lay Water Application Charges | | | ✓ |
| Water Design | | ✓ | |
| Water Authority Charges including Self-Lay Charges, Infrastructure, Sewer and Metering | | | ✓ |
| | | | |
| Offsite water mains connection | | ✓ | |
| Water communication pipe supply & install | ✓ | | |
| Boundary box/manifold supply & install | ✓ | | |
| Water service pipe supply & install | | | ✓ |
| Water mains pipe supply and install | ✓ | | |
| Water Meter fitting | ✓ | | |
| Water testing and commissioning, including chlorination | ✓ | | |
| Water in-line mains connection | | ✓ | |

(8)

Any works to be completed by client shall be completed to comply with the relevant developer guide; these works shall be made available for auditing and inspection by Harlaxton Engineering Services or the appropriate parties (providing reasonable notice) as, and when, requested.

2.1 Legal Requirements and Charges

We have included for standard easements wayleaves, leases, transfers, conveyances and adoption costs that do not require third party legals i.e. when the 'onsite' proposed routes are solely under the ownership of the client. Should third parties become involved, these costs will be paid for by **Fuel Solutions**. For further information, please refer to our standard Terms and Conditions Rev G dated February 2019 attached to the document.

2.2 Standard Assumptions

- Prior to our works commencing on site, **Fuel Solutions**, will provide details (including but not limited to, Depth, location, etc.) of all existing underground plant/ equipment. No claims for damage to existing equipment will be entered into if these details are not provided.
- **Fuel Solutions** will be required to sign our line and level forms to confirm the setting out of site.
- Mains laying phases may incur additional costs to **Fuel Solutions**.
- Every precaution should be taken to ensure that cable, plant or equipment on site is removed from the route that needs to be excavated prior to the commencement of work; and that any cable, plant, or equipment required by Harlaxton Engineering Services to fulfil the terms of this offer are easily accessible.

Should any of the information or assumptions prove to be incorrect or unacceptable; we would be pleased to amend our offer as necessary, in line with your specific requirements.

2.3 Design Approval

On acceptance of our offer, payment of the deposit, and receipt of requested design pro-forma, Harlaxton Engineering Services shall commence formal design work and submit our offer for approval to the relevant network owners who need sufficient time to approve the design. Once design has been submitted any variances to this will incur a redesign fee, chargeable to **Fuel Solutions**.

3. Design Proforma

Following acceptance of Harlaxton's quotation, please forward all relevant design proforma information.

We anticipate timescale to obtain all the necessary design approvals is typically 4-6 weeks from receipt of all requested design proforma information, depending on the scheme's complexity.

(9)

| Information Required to enable completion of the Design Approval Process* | Provided Y/N or N/A |
|---|--------------------------------|
| Deposit Payment | |
| Most current site layout in .DWG format detailing Electricity, Gas and Water meter positions | |
| Floorplans for any apartment blocks showing meter positions | |
| Suggested route of Mains/Services or Water Design | |
| Copy of the Section 38 drawing (adoptable roadways and footpaths) | |
| Copy of the Individual Plot Boundaries (conveyance plan) in PDF or DWG | |
| Confirmation of your site start date | |
| Current Housing Schedule | |
| Expected date of first utility connection | |
| Current Landowner and their solicitors contact details | |
| Future Landowner contact details (ie – Housing Association) and their solicitors contact details | |
| Estimated Date of transfer to Future Owner | |
| Preferred Supplier (ie – British Gas, E-On) | |
| CDM/Project Details | Provided Y/N or N/A |
| Details of the CDM Principal Designer and copy of F10 (If applicable) | |
| If your development <u>has</u> a Pumping Station | Provided Y/N or N/A |
| Single or Three-Phase Supply | |
| Starting or Running Current | |
| Number of Starts per minute | |
| Power Factor/Rating | |
| If your development <u>has</u> a Landlord Supply | Provided Y/N or N/A |
| Electric LLS – Capacity in kVA | |
| Electric LLS – Single or Three-Phase Supply | |
| Whilst the Following are not required for the initial design they are (where applicable) required for scheme completion/energisation | Provided Y/N or N/A |
| Postal Addresses including Postcodes and UPRN's | |
| Completed UMSO form (Harlaxton to forward) | |
| Plan Showing Streetlighting Positions | |
| Site Manager's Contact Details | |

Note* - further information may be required as the design approval process progresses, which will be notified by your account manager.

4. Acceptance of the Quote

This quote is subject to site survey.

If you are happy with the above quotation, there are a number of steps that need to be taken in order to move things along.

(10)



Harlaxton

Engineering Services Limited

- Please sign and date the below acceptance form and return it to us as a formal acceptance of the quotation
- Please enclose a cheque for the deposit made payable to Harlaxton Engineering Services or transfer the monies to our account (details under **Payment Terms**).
- Please supply all requested design proforma information (**found in section 3 of this quotation**), completed Head of Terms form and individual plot boundary plan.

This offer is subject to Harlaxton Engineering Services Standard Terms & Conditions Rev G dated February 2019; a copy of which is included with this quotation/ proposal. Please read the attached Terms and Conditions; these are for your information and do not need to be returned.

PLEASE KEEP A COPY OF THIS DOCUMENT – AN INVOICE WILL BE SUPPLIED UPON RECEIPT OF PAYMENT

Terms & Conditions

Civil Works

Harlaxton's Quotation has been prepared on by way of a "desktop" inspection of the "proposed route" and the entire "offsite" route. The price quoted is fixed for excavation and re-instatement in the surface material apparent at the time of inspection.

Should we subsequently discover concrete beneath asphalt / bituminous type wearing surfaces, concrete surfaces of greater than normal (150mm) thickness, or reinforced concrete and a direct route through the aforementioned surfaces is required, we shall seek to be reimbursed for all additional net costs.

Should the above situation arise we shall deviate from the route where practical and in the event the total aggregate route length as described in our quotation increases by less than 2% due to such deviations to avoid such unforeseen conditions, all additional costs will be borne by Harlaxton Engineering Services Ltd.

We have included for traffic management in accordance with NRSWA Code of Practice, Safety at Street Works and Road Works, and reinstatement in accordance with HAUC specification SROH, issued under NRSWA. Where local authorities determine through their local policies that they require, additional trench width reinstatement, road closures, diversions or out of hours working, such restraints would afford additional costs & time borne by the client. We draw your attention to the fact our offer is based on the relevant local authorities granting permissions and permits for undertaking the stated route and is subject to inspection of existing utility drawings within the vicinity. In some cases it may be necessary to provide the local authority with a minimum of 3 months' notice, prior to commencement of work, dependent upon the location and duration of the proposed activity. In the eventuality that the local authority dictate that the route is required to change, we reserve the right to amend our offer to allow for non-standard traffic management and/or restricted working times. Unless otherwise stated we have only allowed for automatic 2/3 way lights, if a more complex traffic management scheme is required then there will be additional cost.

Should the quotation include for client to be responsible for the onsite excavation and the quotation is for multi utility (water, gas & electric) offering the client must provide a multi utility stepped trench with sufficient sand bedding and sand coverage from the top of duct/cable /pipe. The excavation and multi utility trench layout and depths should be based on the latest NJUG (National Joint Utilities Guidance) for utility formations within the carriageway and footway.

Variation

Where dictated that Harlaxton are to provide the onsite excavation, only 'soft dig' has been allowed for. If any obstructions such as hard rock, concrete, or building foundations etc. or where a deeper depth is required will constitute a variation to the contract and an extra charge will be claimed, along with any additional time expended to undertake the work.

We have included for normal pumping for inclement weather only. The need to have permanent de-watering plant on site is excluded.

We have not included in our Quotation a cost for disposal of contaminated ground.

When cables are installed, we will conduct cable sheath and continuity tests and provide test results sheets and be handed to and signed by client, any subsequent damage to cables sheaths or conductors will be considered out of our control and additional to our scope of supply, re-tests for cable damage is considered additional and an additional charge will be made. When cables are terminated, we will test the cable sheath and continuity.

Harlaxton reserves the right to make an additional charge for any of the following:

- Any error, omission or inaccuracy in any of the assumptions or matter identified in the Quotation.
- Any other information provided by you, DNO/IDNO/GT/IGT/WA or third party concerning any existing Network or infrastructure which such events necessitate a variation or other change to the design or performance of the works whether to connect to any existing Network in accordance with the IDNO or otherwise
- Items of historical archaeological or special scientific interest and any such obstruction or conditions that necessitate a variation or performance of the works
- If Harlaxton Engineering Services are to undertake the water meter fitting these are to take place at the same time as the service connection. Should a separate visit be required to install the water meters then additional charges may apply.

Project Establishment, Access & Egress

Our offer has been based on the Principal contractor for the site providing all welfare facilities for the on and off site works.

Our offer is based on an area being allocated on site suitable for secure storage. Once the goods have been delivered to site all site insurance and security become the responsibility of the main client.

Our offer has allowed for the delivery, and off-loading of plant, with the use of a HIAB type vehicle, which must have sufficient and unimpeded access to immediately adjacent the substation site during scheduled delivery periods.

Off-loading is assumed to be on hard standing adjacent to the works

Scheduling & Programs

We have allowed for the works to be carried out in normal daytime working between the hours of 08:00 – 16:30 Monday & Friday only excluding Bank Holidays. Any variance to this shall be agreed between the parties in writing. Additional costs may be applicable and borne by the client for hours worked outside the normal working hours should the local authority or network operators dictate such conditions.

The anticipated minimum build period, ready for final connections subject to any distribution works required and are subject to:

- Successful agreement of Harlaxton's terms of Quotation and receipt by Harlaxton of Acceptance Form and initial payment
- Payments are received by Harlaxton Engineering Services Ltd as per quotation in accordance with Harlaxton General Conditions of Contract (version 1 2016) which can be downloaded from our website <http://www.harlaxton.com>
- Harlaxton Engineering Services Limited retains legal ownership of all goods until payment of all monies due and owing under the contract are received from the customer.
- Any goods delivered to the customer will be insured by the customer at their own cost at the point of delivery
- Harlaxton Engineering Services Limited reserves the right to enter the buyer's site/premises to seize/repossess their materials/good/ equipment if payment is not received within the timescales laid down and agreed within the quotation.
- The Design being approved by the adopting Network Operator
- Suitable site access.
- Completion of all legal documentation where required by Harlaxton and/or Licensed Network Operator/ and/or any Third Party

The quotation/proposal is made with the assumption that the works will be awarded in line with our quotation and with continuous working, with the transgression from each of the stages unless otherwise stated in the quotation as detailed below.

Legal Obligations

There will be certain aspects relating to the works that can be only carried out by the Client whichever organisation undertakes the project, these would need to be in place prior to energisation of the Network (Electrics) or adoption of the pipework (Gas) or Agreement with the Water Company such as:-

- Wayleaves/easements/lease/conveyance/transfer deeds **as may be required between the client and/or Harlaxton/LDNO/third party**
- Connection Agreement (**Electrics only**)
- Securing of supply capacity (**Electrics only**)
- Appointment of Energy Supplier (**Gas & Electrics**)
- Appointment of Meter Operator (**Electrics only**)
- Self-Lay Agreement (SLA) (**Water only**)
- Any other document specific to Harlaxton Engineering Services Ltd.

Should we be successful in being awarded this project along with management of the non-contestable works we would be happy to provide the necessary support and guidance in ensuring the above legal requirements are compliant.

We will need to obtain legal consents and/or wayleaves/easements/leases/conveyances or transfers of land from appropriate parties for the installation of plant, cables, pipes, and equipment. We will require you to provide such assistance as we may reasonably request and we expect you to pay all the reasonable legal costs in obtaining such consent and/or wayleaves, easements, leases, conveyances or transfers from third parties and/or land agents.

You are advised against disposing of your interest in any part of the development which might be subject to the easement before the same has been noted at the Land Registry where easements are required. Harlaxton Engineering Service will not bear any additional legal costs which might arise should this requirement be disregarded.

A fee may be necessary in consideration for the grant of cable easements and/or wayleaves for the grant of the freehold interest in such land which is payable by the client.

We shall not be obliged to commence the works until completion of the lease, conveyance, or transfer to the Distribution Network Operator of the legal title to the land together with all the necessary consents, easements and wayleaves required for us to carry out the works.

If the terms and conditions or scope of the works are varied as a result of the necessary leases, conveyances or transfers not being obtained within a reasonable time then the price will be amended to reflect any alterations required.

The client and/or their Solicitors must advise Harlaxton immediately of any proposed changes that may affect the legal obligations/acquisitions (i.e. change in current ownership or intended change by way of sale of individual or multi plots by clients/Developers to enable agreement to be reached between the parties to ensure documentation in respect of any ongoing disposal/sale incorporates the suitable service rights to enable Harlaxton or adopting Utility company to comply with their License conditions.

Conditions of Offer

Our offer is submitted on the understanding that suitable financial guarantees will be available should any subsequent review of the project indicate their necessity. Any additional costs associated with this scheme not covered within the scope of this document, are subject to the same payment terms.

Unless otherwise agreed in writing, all payment for works must be undertaken prior to commencement of works.

Quotations are based on the development proceeding as a whole. It cannot be assumed that the costs will be allocated proportionally if carried out in different phases, by different developers or omitting individual utilities. Our quote is subject to satisfactory site progress.

All mains must be laid within 12 months of the date of order. All Connections to the existing mains (CSEP, POC, and Source of Water connections) must be undertaken within 6 months of acceptance of this offer unless otherwise agreed. Any mains not laid within 12 months of the date of order will be subject to RPI +2%.

Terms and Conditions of Contract for new Connections

These are the Terms and Conditions applicable to the quotation supplied. Please also refer to our Harlaxton General Conditions of Contract (version 1 2016).

Under the clauses of the LDNO (Electrics)/ GT/IGT (Gas) specified adoption agreement being entered into by ourselves on your behalf, we would hereby confirm that the title of the works being undertaken will be passed to the LDNO/GT/IGT under such an adoption agreement.

Self-Lay Agreements (SLA) (Water), are required to be entered into between the Developer/Landowner/Third Party (if necessary) and Harlaxton. Under an SLA the responsibility is acknowledged to lie with the Developer/Landowner to secure any legal consents/ requirements of the Water Authority in respect of Mains Supply Pipe(s) to enable the Asset Value to be paid directly to the Developer/Landowner. Harlaxton Engineering Services may require proof that any legalities which are necessary are in place.

In the case that the Customer has agreed to have the entirety of the water asset valuation assigned to Harlaxton Engineering Services, a separate letter detailing the assignment shall be required from Customer at the time of acceptance. The asset valuation quoted in the self-lay agreement provided by Water Authority is a budget only; the final asset valuation will be assessed by the Water Authority upon completion of the installation, the Customer will be responsible for covering any variance between these values.

Title prior to this adoption will be in accordance with the terms and conditions of the contact between us.

Health, Safety and Environment

The proposal includes for full project management of the works, including all on site testing and commissioning.

Furthermore our offer allows for compliance with the requirements of the CDM regulations in the role of Sub-Contractor on/off site. Although all general health and safety issues, including design, have been considered in our offer, at present we have not received the pre-tender health and safety plan document and reserve the right to adjust our offer accordingly.

We have included for the removal of normal waste only, the removal of any contaminated or special waste is excluded from our offer.

GDPR

Harlaxton Engineering Services Ltd together with our associate companies are committed to protecting the privacy and security of personal information in accordance with the General Data Protection Regulation (GDPR).

The terms of Harlaxton Engineering Services Privacy Policy which can be viewed on our website www.harlaxton.com in relation to any personal information provided to us which may be used in connection with this quotation and any legal obligations detailed within your quotation which may include passing essential information onto third parties to procure the Land Rights documentation pertaining thereto in line with our Privacy Policy.

Glossary of Terms

ASC (Authorised Supply Capacity)

Means the agreed maximum capacity measured in kilo volt-amperes you are allowed to take from the Distribution System through the nominated Point Of Connection

AV (Asset Valuation)

Means any Asset Valuation being offered from the adopting Network Operator

Contestable Works

Work that can be undertaken by an approved ICP contractor such as Harlaxton Engineering Services Ltd

Highway

Means any respect of works being conducted in the highway as defined in NRSWA (1991)

GT/IGT

Means the Gas Transporter/independent Gas Transporter licensed under the Gas Act 1986 (as amended)

CSEP

Means Connection System Exit Point. This is the designated point of connection to the existing GT/IGT supporting network.

LDNO

Means the Licensed Distribution Network Operator under the Electricity Act 1989 (as amended) which constitutes LDNO and IDNO

LDNO Asset Diversion Charges

This charge may be applicable if diversions of any plant or apparatus owned by the incumbent LDNO are deemed necessary to make way for your development. This charge is applicable regardless of whoever undertakes the contestable elements of the work. Asset diversions are non-contestable and can only be undertaken by the LDNO. The charge will be the same for all third parties.

LDNO Design Approval & Inspection Charge

This charge is applicable, regardless of whoever undertakes the work. The charge is for inspection and monitoring of the sub-contract works at the construction phase of the project.

LDNO Legal Consents Charge

This charge is applicable where plant and apparatus are installed within privately owned land, such as a cable that crosses land owned by a third party. It is a charge for the time spent by the LDNO legal representatives in liaising with Landowners and obtaining the necessary consents.

Easement / Wayleave

An Easement is a perpetual right negotiated by and granted to the distribution network operator to install and maintain cables pipes and/or equipment under or over private land normally without restriction. A Wayleave is for limited duration.

Third Party

It may be necessary to approach third party(ies) landowner (s) in relation to obtaining an Easement/Wayleave.

LDNO Upstream Reinforcement Charges

This charge may be applicable if reinforcement becomes necessary to the LDNO system. The reinforcement of the system may be necessary to facilitate the connection of your development. This charge is applicable regardless of whoever undertakes the contestable elements of the work. The charge will be the same for all third parties.

NRSWA

Means the New Roads & Street Works Act 1991 and any other regulations or amendments

Non-Contestable Works Work that can only be carried out by the LDNO (Licensed Distribution Network Operator)

Point Of Connection

This is the designated point of connection to the existing distribution system from which the new network shall be extended.

The charge associated with this is levied regardless of whoever undertakes the work to extend the LDNO system. It is provided by the LDNO and is a charge for assessment of the distribution network, based upon the electrical demand requirements for your development. The charge will be the same for all third parties.

SLA (Self Lay Agreement)

Means Self Lay Agreement that is entered into by Harlaxton (SLO), developer/landowner/third party (if necessary & the Water Undertaker stating the terms & conditions of which the works can be completed under Section 51 of the Water Act (1991)

Soft Dig

Soft-dig is a term used to describe a method of removing the earth such as sand, mud, dirt and soil.

APPENDIX 7

UU Water Charges
Scheme 2020/2021

Charges Scheme
2020/2021

New connections and developer services

Charges schemes

United Utilities Water Limited has published four charges schemes for 2020/2021 charging year. They include the charges to be paid for services provided by us in the course of carrying out our function as a water and sewerage undertaker. Below are details of all the schemes published by us.

This scheme is –

New connections and developer services charges scheme

This charges scheme sets out the charging policies and the charges for the year commencing 1 April 2020, for water supply and sewerage connections and developer services

The others are

Wholesale water charges scheme

This charges scheme sets out the charging policies and the charges for the year commencing 1 April 2020 for wholesale water services

Wholesale sewerage charges scheme

This charges scheme sets out the charging policies and the charges for the year commencing 1 April 2020 for wholesale sewerage services

Household charges scheme

This charges scheme sets out the charging policies and the charges for the year commencing 1 April 2020, chargeable to household customers

All of the charges schemes shown above, and our **Charges statement for New Appointments & Variations** are available to download from our website: [unitedutilities.com](https://www.unitedutilities.com)

United Utilities Water Limited – regional map



New connections and developer services charges scheme 2020/2021

Contents

| | | |
|----------|---|-----------|
| 1 | Scope of this charges scheme | 6 |
| 2 | Pre development | 7 |
| 3 | Who can carry out work?..... | 8 |
| 3.1 | Water..... | 8 |
| 3.2 | Sewerage..... | 8 |
| 4 | Obtaining a water supply for your development | 9 |
| 4.1 | Agreements | 10 |
| 4.2 | New mains for development..... | 10 |
| 4.3 | Charges associated with self-lay schemes | 11 |
| 4.4 | Statutory mains requisition – installation by United Utilities..... | 13 |
| 4.5 | Construction charges for water developments | 14 |
| 4.6 | Water connections | 16 |
| 4.7 | Water main diversions | 21 |
| 4.8 | Water asset abandonment | 22 |
| 4.9 | Building over water assets | 23 |
| 5 | Obtaining sewerage services for your development | 24 |
| 5.1 | Sewer requisition | 24 |
| 5.2 | Estimated value of works | 25 |
| 5.3 | Sewer Diversion..... | 25 |
| 5.4 | New connections to the public sewer..... | 27 |
| 5.5 | Sewer abandonment | 28 |
| 5.6 | Adoptions of Sewers and disposal works..... | 28 |
| 5.7 | Building over sewers | 30 |
| 6 | Infrastructure charges | 32 |
| 6.1 | Introduction..... | 32 |
| 6.2 | Infrastructure charges for NAV developments | 33 |
| 6.3 | Infrastructure charges for sustainable developments..... | 34 |
| 6.4 | Calculation of the infrastructure charge | 34 |
| 6.5 | Relevant multiplier for calculation of Infrastructure charge | 35 |
| 7 | Income offset | 37 |
| 7.1 | Calculation of income offset | 37 |
| 7.2 | Income offset for NAV developments..... | 37 |

| | | |
|-----------|--|-----------|
| 7.3 | Water mains laying schemes agreed prior to April 2020..... | 37 |
| 8 | Water used during development | 38 |
| 8.1 | Temporary connection for building water | 38 |
| 8.2 | Building water charges | 38 |
| 9 | Miscellaneous..... | 39 |
| 9.1 | Traffic management | 39 |
| 9.2 | Site visit charges | 40 |
| 9.3 | Trial holes | 40 |
| 9.4 | Fire Hydrants | 41 |
| 9.5 | Excavation through rock or artificial hard material | 41 |
| 9.6 | Pressure testing and Sampling | 42 |
| 9.7 | Demobilisation/Remobilisation charges | 42 |
| 9.8 | Repairs for damage | 42 |
| 9.9 | Illegal connections..... | 42 |
| 9.10 | Defective fittings | 42 |
| 9.11 | Replacement of lead service pipes..... | 43 |
| 9.12 | Water drawn from hydrants | 43 |
| 10 | Construction rates - sewerage developments | 44 |
| 11 | Rates for calculation of estimated value of works | 49 |
| 12 | Examples of additional costs | 52 |
| 13 | General information | 54 |
| 13.1 | Charges..... | 54 |
| 13.2 | Charges for elements of work affected by exceptional circumstances | 54 |
| 13.3 | Timing of Payment | 54 |
| 13.4 | Value Added Tax (VAT)..... | 54 |
| 13.5 | Traffic Management Act 2004..... | 54 |
| 13.6 | Transitional arrangements | 55 |
| 14 | Contact us | 55 |
| 14.1 | Further information | 55 |
| 14.2 | Disputes..... | 55 |
| 15 | Payment | 57 |
| 16 | Definitions..... | 58 |
| 17 | Appendix 1 Worked Examples – Standard Industry Scenarios..... | 62 |
| 18 | Appendix 2 – Further Example Developments | 78 |

1 SCOPE OF THIS CHARGES SCHEME

This charges scheme is made by United Utilities Water Limited under the provisions of the Water Industry Act 1991 (as amended).

It sets out the charges made by us for the services relating to new connections to the water and sewerage network or other work required on the water and sewerage network as a result of a development, in the course of carrying out our functions as a water and sewerage undertaker under our Instrument of Appointment (as updated).

This charges scheme sets out our charges, terms and conditions for all customers requesting new connections services including developers, new appointees, self-lay providers and retailers, applicable to the charging year 2020/2021.

It comes into effect on 1 April 2020 and shall remain in force until revoked, amended or modified by us.

This charges scheme as well as other leaflets are published on our website at:

[unitedutilities.com/builders-developers](https://www.unitedutilities.com/builders-developers)

2 PRE DEVELOPMENT

We encourage developers to talk to us at the earliest stages of planning their development using our pre-development enquiry service to understand how water and sewerage services may be provided to the proposed development.

Early discussions with us can help prevent delays at a later date.

There is no charge for our pre-development enquiry service. The service will help you to find out if there are any existing water and sewerage assets within your development area, and help us to identify any reinforcement or diversion of assets which may be required.

Where complications are identified at the pre-development enquiry stage, you require multiple options to be explored or you are intending to work in close proximity to one of our critical assets, further work may be required to develop a solution.

Charges will apply for this further work and these will depend on the extent and complexity of work to be carried out.

You will be notified of applicable charges before any chargeable work begins.

Before submitting a planning application we also encourage developers to make sure that there are no assets or infrastructure crossing the site that may impact their proposals. It is the developer's responsibility to understand what is above or below ground and how this relates to their proposed development. This can sometimes have a significant impact on how a development is delivered.

Pre-development enquiries

Our pre-development enquiry service is free of charge. This service includes assisting you in developing the water and sewerage requirements for a potential development site.

Contact us using our pre-development enquiry forms which can be found on our website:

unitedutilities.com/builders-developers/larger-developments/pre-development

3 WHO CAN CARRY OUT WORK?

Where development work is undertaken, you often have a choice of who carries out the work. This type of work is known as contestable work.

Some types of work can only be carried out by us. This is known as non-contestable work.

3.1 Water

For self-lay developments, a Self-Lay Provider (SLP) or New appointment & variation (NAV) may undertake aspects of the work which are deemed contestable, subject to suitable accreditation.

Any work that may result in supply interruptions or affect water quality to existing customers is non-contestable. Examples include:

- establishing a point of connection to our existing network;
- designing and installing reinforcement work;
- work on an existing main requiring specialist attention due to risk associated with it because of the material type, previous history or its strategic importance;
- work to any assets that are within a United Utilities Water building e.g. pumping stations;
- installation of an offsite main intended to be shared with an unrelated new development;
- installing meters larger than 20mm;
- service connections greater than 63mm.

The table in section 4 gives an overview of which work may be carried out by an SLP or NAV and which can only be carried out by us.

Please refer to the United Utilities Contestability Summary for full details:

unitedutilities.com/builders-developers/self-lay-providers

Further details about the self-lay option and NAV provisions can be found on our website.

3.2 Sewerage

Unless otherwise indicated, all aspects of sewerage development work are considered to be contestable work.

4 OBTAINING A WATER SUPPLY FOR YOUR DEVELOPMENT

Where a new water supply is required for a new development there are a variety of options available.

The table below indicates which work may be carried out by an SLP or NAV and which can only be carried out by us.

| Work required | | Can be carried out by |
|--|---|--|
| Mains installation | New mains may be required if either an existing main cannot be utilised or a suitable main is not available | <ul style="list-style-type: none"> • SLP • NAV • Us |
| Branch connection | Branch connections are required to allow a new main to connect to an existing water main on our water network | <ul style="list-style-type: none"> • SLP* • NAV* • Us |
| Piece up connections | Piece ups are required when the branch connection has been installed onto the existing main, but not yet connected to the new main. Additional piece-up connections may be required as a development progresses | <ul style="list-style-type: none"> • SLP* • NAV* • Us |
| End Connections | End connections are required when an extension to an existing main is needed instead of a branch connection. An end connection may also be required in order to divert or abandon a main. | <ul style="list-style-type: none"> • Can only be carried out by us |
| Plot connections | Plot connections are connections made between the plot boundary or agreed connection point and the main | <ul style="list-style-type: none"> • SLP* • NAV* • Us |
| Meter installation | <p>Automated meter read (AMR) enabled meters must be installed for new domestic connections above ground in one of the following locations;</p> <ul style="list-style-type: none"> - Internally fitted with an external control valve; - In a wall mounted meter chamber; - In an in-wall meter chamber <p>Where this is not possible, we will agree an alternative location with you.</p> <p>All meter chambers must be WRAS approved or equivalent</p> | <ul style="list-style-type: none"> • SLP • NAV** • Us |
| <p>*Please see our Contestability Summary for specific details of all work types</p> <p>**Where a NAV installs a main, we will install a bulk meter.</p> | | |

4.1 Agreements

Where you ask us to carry out work, you will be required to provide a signed acceptance of the terms of the agreement before any work can commence.

You may choose to employ an approved SLP or NAV to carry out the work. Where this is the case, all parties will be required to enter into a legal agreement issued by us before any work can commence.

4.2 New mains for development

Where a new water main is required for a development in our region, the following options are available;

4.2.1 Self-Lay Provider or NAV

You may choose to employ an approved SLP or NAV to install the main.

Where an SLP installs the main for the developer we will then adopt the new main on connection to our water network (see 4.3).

Any construction carried out under self-lay provisions remain the responsibility of the SLP until permanent connections are made. On connection to our water network a c Certificate will be issued confirming the date of transfer of ownership as the date of connection.

4.2.2 Statutory mains requisition

You may ask us to install a main (see 4.4).

4.3 Charges associated with self-lay schemes

The charges associated with a self-lay scheme are detailed below.

4.3.1 Self-lay application fees

Self-lay application fees are payable on application and are non-refundable. Where you ask us to revise a quotation for a development, a re-quotation fee is payable.

| | Includes | Charge | |
|--|---|--------------------------------|---|
| Self-lay application fee | Processing of application, creation of legal agreement, confirmation of the fixed price, initial site inspection and design approval or branch design (as appropriate) | £227.00 | |
| Self-lay re-quotation fee | Processing of application, re-approval of design and creation of legal agreement (where required) | £102.00 | |
| | | Single water connection | Each additional connection under same application at same location |
| Self-lay connection off existing main application fee | Vetting and processing of your application, checks to identify operational risks associated with your request, a service connection agreement, confirmation of the fixed price and a site visit | £80.00 | £34.00 |
| Self-lay connection off existing main re-quote fee | Vetting and processing of your application, confirming the fixed price and service connection agreement | £34.00 | £14.00 |

4.3.2 Self-lay administration fee

The self-lay administration fee is payable on acceptance.

| | Includes | Charge |
|------------------------------------|--|----------------|
| Self-lay administration fee | Management of signed agreement , promotion of work to contractor for branch/ piece-up connections, or tracking of contestable activity, construction visit and processing of vesting certificates and payments | £348.00 |

4.3.3 Construction charges

Construction charges for enabling works associated with self-lay schemes are detailed in section 4.5.

4.3.4 Meter related charges for self-lay schemes

Where you ask us to install meters on your self-lay scheme, the following charges (see also 4.6.6) will apply when the meters are fitted:

| | Includes | Charge |
|---|---|----------------|
| Meter related charges for self-lay schemes – per meter | Supply and install standard 15 – 20 mm manifold meter | £94.00 |
| | Supply and install standard 15mm – 20mm in-line meter | £143.00 |

4.3.5 SLP notification

Within five calendar days of a property being connected to the water network, you must:

- Notify us of a connection and provide meter details; or
- Notify us of a connection and ask us to fit a meter. The site must be ready for us to fit the meter.

Where you do not notify us of a connection, or meter details are misreported, a site visit charge will apply (see 9.2).

All meters fitted must be sourced directly from our nominated supplier (details available on request) to ensure that all meters meet our specifications.

If an SLP fails to install a meter(s) following a property being connected to the water network, we will fit a meter to each property and charge the cost of the meter installation and any applicable site visit charges to the self-lay provider (see 4.3.4 & 9.2).

4.3.6 Self-lay service connection - administration charge

Where an SLP carries out a service connection and meter installation, a charge will apply to reflect the costs incurred in administration of a new self-laid service connection.

A charge for each new self-laid service connection is payable when you notify us that the property has been connected to the water network.

| | Includes | Charge |
|--|--|---------------|
| Service connection administration charge - per self-laid service connection | Administration of new self-laid connection | £17.00 |

Where you ask us to carry out service connections, charges as stated in 4.6.3 will apply.

4.3.7 Self-lay payments

Where we need to change the self-lay design, such as increasing the size of a main to provide capacity for a future development we will make a payment to the self-lay provider to cover the additional costs.

We will require you to provide evidence of additional costs that will be incurred by you and details of these costs will need to be agreed before any work commences.

Self-lay payments will be paid on vesting of the asset.

4.4 Statutory mains requisition – installation by United Utilities

Requisition charges relate to work carried out by us in accordance with the duties imposed by section 41(1) of the Act. They relate to the cost of providing site specific infrastructure necessary for the provision of a water main.

4.4.1 Requisition application fees

Requisition application fees are payable upon application and are non-refundable.

Where you ask us to revise a quotation for a development, a re-quotation fee is payable.

| | Includes | Charge |
|-------------------------------------|--|----------------|
| Requisition application fee | Processing of application, single site visit, scheme design, confirmation of fixed price, design drawing | £358.00 |
| Requisition re-quotation fee | Processing application, producing quotation and design drawing | £106.00 |

4.4.2 Requisition administration fee

Requisition administration fees are payable on acceptance and are non-refundable.

| | Includes | Charge |
|---------------------------------------|--|----------------|
| Requisition administration fee | Management of customer acceptance promotion of work to contractor and a construction visit | £257.00 |

4.4.3 Water connections associated with a statutory mains requisition scheme

Where water connections are associated with a statutory mains requisition scheme, a charge will apply to reflect the costs incurred in administration of these connections.

Where this is the case, charges detailed in 4.6.1 and 4.6.2 will not apply to these connections.

A charge is applicable for each service connection associated with a statutory mains requisition scheme, and is payable upon completion of the connection(s).

| | Includes | Charge |
|--|----------------------------------|---------------|
| Service connection administration charge - per connection | Administration of new connection | £17.00 |

4.5 Construction charges for water developments

Construction charges for mains requisitions and enabling work for self-lay schemes are detailed below.

Charges are payable before commencement of work.

4.5.1 Mains connection charges

These charges include up to two metres of pipework of appropriate size. Where additional pipework is required, charges as quoted in 4.5.2 will apply for each additional metre in addition to mains connection charges.

| Mains connection | Size of new pipe (mm) | Unsurfaced | Surfaced |
|-------------------|-----------------------|------------------|------------------|
| Branch connection | 50-99 | £3,572.00 | £4,429.00 |
| | 100-160 | £4,484.00 | £5,595.00 |
| | 161 – 315 | £5,380.00 | £7,383.00 |
| Piece up | 50-99 | £782.00 | £1,070.00 |
| | 100-160 | £858.00 | £1,116.00 |
| | 161-315 | £1,604.00 | £1,965.00 |
| End connection | 50-99 | £906.00 | £1,489.00 |
| | 100-160 | £1,161.00 | £1,870.00 |
| | 161-315 | £2,085.00 | £2,497.00 |

For mains connections larger than 315mm (including branch connections of any size to an existing main larger than 315mm) individual quotes will be provided upon request

4.5.2 Mains laying charges

Charges are per metre and are inclusive of testing, all fittings and reinstatement where required.

| Mains laying | Size (mm) | Lay only | Lay in duct | Unsurfaced-open cut | Surfaced-open cut | Not in trench - surfaced |
|--------------------|-----------|----------------|----------------|---------------------|-------------------|--------------------------|
| Polyethylene main | 50-99 | £41.00 | £85.00 | £129.00 | £198.00 | £217.00 |
| | 100-160 | £54.00 | £109.00 | £157.00 | £241.00 | £254.00 |
| | 161-315 | £118.00 | £171.00 | £226.00 | £300.00 | £317.00 |
| Barrier Pipe main* | 50 – 99 | £59.00 | £100.00 | £152.00 | £223.00 | £198.00 |
| | 100-160 | £78.00 | £130.00 | £187.00 | £274.00 | £244.00 |
| | 161-315 | £117.00 | £191.00 | £220.00 | £322.00 | £299.00 |

*only available where identified as a requirement by a soil sample risk assessment

For mains larger than 315mm, individual quotes will be provided upon request.

New connections and developer services charges scheme 2020/2021

4.5.3 Service transfers

Where a main has been constructed or diverted, requiring existing services to be supplied from the new main, a charge for transferring each service from the existing main to the new main will be applied.

The charge includes up to two metres of pipework. Where additional pipework is required, charges as quoted in 4.6.3 will apply for each additional metre in addition to charges quoted below.

| Work description | | Charge |
|-------------------------------|------------|----------------|
| Service Transfer – up to 50mm | Unsurfaced | £429.00 |
| | Surfaced | £654.00 |

4.5.4 Mains laying network assembly charges

Network assemblies include, but are not limited to, valves and washouts.

Charges will apply when we need to install replace or remove a network assembly on an existing main in order to facilitate development work.

Charges include all excavation and backfill in a single excavation of an appropriate size, including associated chambers.

| | Size (mm) | Charge | |
|---|-----------|------------------|------------------|
| | | Unsurfaced | Surfaced |
| Install/Replace/Remove network assembly on existing main (per item) | 50-160 | £1,130.00 | £1,559.00 |
| | 161-315 | £1,956.00 | £2,452.00 |
| Install/Replace/Remove additional network assembly on existing main in same excavation (per item) | 50-160 | £642.00 | £687.00 |
| | 161-315 | £1,137.00 | £1,253.00 |

For mains larger than 315mm, individual quotes will be provided upon request.

4.5.5 Install or replace new chambers

Charges will apply when we need to install a new chamber (and transfer the asset) or replace a damaged chamber at the same location for a meter (up to 20mm), boundary box, stop tap, fire hydrant or valve in order to facilitate development work.

| Work description | Includes | | Charge |
|---|---|------------|----------------|
| Install new/replacement chamber (per chamber) | Provision and installation of chamber, transfer of existing meter or network assembly (if appropriate), reinstatement and removal of waste material | Unsurfaced | £288.00 |
| | | Surfaced | £385.00 |

If a new meter or network assembly requiring a new chamber is requested, charges as stated in 4.6.6 and 4.5.4 will apply.

4.5.6 Pressure management

Where pressure management devices are required for site enabling works the following charges may apply.

Requirements will be discussed at pre-development stage.

| | Charge | |
|--|------------------|-------------------|
| | Unsurfaced | Surfaced |
| Bypass | | |
| 50 – 160 mm | £5,875.00 | £7,193.00 |
| 161 – 315 mm | £9,151.00 | £11,151.00 |
| Installation of pressure management valve | | |
| 50 – 160 mm | £3,905.00 | £4,240.00 |
| 161 – 315 mm | £6,759.00 | £7,196.00 |

4.6 Water connections

Water connection charges relate to site specific work carried out in relation to sections 45(1) and 46(1) of The Act. Charges are payable on connection.

Infrastructure charges will also apply to all new water connections (see 6.1). Where applicable, infrastructure credit will be applied (see 6.4.1).

4.6.1 Water connection off an existing main - application fee

Water connection application fees are payable upon application and are non-refundable.

Where you ask us to revise a quotation, a re-quotation fee will be payable.

| | Includes | Single water connection | Each additional connection under same application at the same location |
|--|---|-------------------------|--|
| Water connection application fee | Vetting and processing of your application, checks to identify operational risks associated with your request, a drawing, confirming the fixed price and a site visit | £80.00 | £34.00 |
| Water connection re-quotation fee | Vetting and processing of your application, confirming the fixed price and a drawing | £34.00 | £14.00 |

These charges do not apply where connections are associated with a statutory mains requisition scheme.

4.6.2 Water connection off an existing main - administration fee

On acceptance, a charge for administration of the application is payable.

| Water connection administration fee | Single water connection | Each additional premises under same application at the same location |
|---|--------------------------------|---|
| Includes planning of the associated connection and all administration | £37.00 | £12.00 |

These charges do not apply where connections are associated with a statutory mains requisition scheme.

4.6.3 Connection charges – connections carried out by us

The charge for a new connection includes:

- a visit to inspect your pipework
- connection to the water main
- the cost of laying a communication pipe (up to two metres) from the main to the boundary of the property (or agreed connection point)

Additional charges apply for lengths over two metres, and are quoted per metre. Charges will be rounded to the nearest whole meter.

For 25mm connections, the connection charge includes supply and installation of a 15-20mm meter.

The cost for associated meters and installation for other connection sizes are detailed in 4.6.6.

If you ask us to lay a service pipe from the property boundary (or agreed connection point) to the on – site main in a pre-excavated trench or duct installed by you, the no excavation connection charge will apply. These charges will be in addition to the charge for installation of a service pipe. The entry and exit points for installed ducts must be exposed and any trenches excavated prior to us attending site.

| Connection | | 25mm (includes meter) | 32mm | 63mm | 90mm | 110mm | 160mm |
|---|--|--------------------------|----------------|------------------|------------------|------------------|------------------|
| Up to two metres | Unsurfaced | £454.00 | £438.00 | £2,925.00 | £3,060.00 | £3,377.00 | £3,513.00 |
| | Surfaced | £637.00 | £541.00 | £3,599.00 | £3,743.00 | £4,224.00 | £4,368.00 |
| Each additional metre (Polyethylene) | Unsurfaced | £61.00 | £61.00 | £76.00 | £76.00 | £89.00 | £89.00 |
| | Surfaced | £97.00 | £97.00 | £150.00 | £150.00 | £164.00 | £164.00 |
| | Lay only/laid in ducts | £20.00 | £20.00 | £23.00 | £23.00 | £37.00 | £37.00 |
| Each additional metre (Barrier pipe) | Unsurfaced | £68.00 | £68.00 | £109.00 | £109.00 | £160.00 | £160.00 |
| | Surfaced | £108.00 | £108.00 | £171.00 | £171.00 | £189.00 | £189.00 |
| | Lay only/laid in ducts | £31.00 | £31.00 | £41.00 | £41.00 | £59.00 | £59.00 |
| Boundary box | Where a boundary box is required for a 25mm service, an additional charge of £39.00 will apply to the 25mm connection charges above. Where a boundary box is required for a 32mm service, an additional charge of £149.00 will apply to the 32mm connection charges above. | | | | | | |
| No excavation service connection | | 25mm | 32mm | 63mm | 90mm | 110mm | 160mm |
| | | £404.00 | £311.00 | £2,554.00 | £2,689.00 | £3,002.00 | £3,137.00 |
| Lay customer supplied service 25mm or 32mm in open trench/duct (per metre) (enabling work undertaken by customer) | | £19.00 | | N/A | | | |

4.6.4 Water connections associated with a statutory mains laying scheme

Where water connections are associated with a statutory mains requisition scheme, a charge will apply to reflect the costs incurred in administration of these connections (see 4.4.3) instead of the charges stated in 4.6.1 and 4.6.2.

4.6.5 Take-over of existing supply

Where you request that we consider use of an existing supply as the connection for a proposed development, investigation work including assessment of pipe size, depth and material, may be required to confirm viability.

The application fee is payable upon application and is non-refundable. The administration fee is payable on acceptance.

| | Includes | Charge |
|--|---|---------------|
| Take over supply application fee | Vetting and processing of your application, and fixed price quotation | £82.00 |
| Take over supply – administration fee | Initial site investigation, planning associated work and all administration | £89.00 |

Further investigation requirements will be assessed on a case by case basis and could include, but will not be limited to, items such as trial holes and water quality sampling (see section 9 for details of individual charges that may apply).

You will be notified of any additional requirements before any work is carried out.

Metering arrangements will be assessed and applicable charges included in the quotation.

4.6.6 Meter charges

Charges for meter provision and installation are listed below.

| Meter provision | | | |
|---|----------------------------------|--------------------------|-----------------------|
| Meter size (mm) | Manifold or in-line meter | Combination meter | Meter strainer |
| 15-20 | £50.00 | n/a | n/a |
| 25 | £61.00 | n/a | n/a |
| 40 | £89.00 | n/a | n/a |
| 50 | £184.00 | £432.00 | £105.00 |
| 80 | £230.00 | £575.00 | £127.00 |
| 100 | £266.00 | £635.00 | £160.00 |
| 150 | £331.00 | £1,606.00 | £270.00 |
| Requirements for a strainer and/or combination meter will be determined by us. You will be notified of the requirements before any work is carried out. | | | |

| Meter Installation | | |
|---------------------------|-----------------------|------------------|
| Meter size (mm) | Location | Charge |
| 15-25 manifold | Internal or external | £42.00 |
| 15-20 in-line | Internal | £92.00 |
| 25-40 in-line | Internal | £128.00 |
| | External - unsurfaced | £839.00 |
| | External - surfaced | £935.00 |
| 50 | Internal | £684.00 |
| | External - unsurfaced | £1,648.00 |
| | External - surfaced | £1,715.00 |
| Larger than 50 | Internal | £1,695.00 |
| | External - unsurfaced | £2,701.00 |
| | External - surfaced | £2,846.00 |

4.6.7 Multiport meter boxes

The following charges apply where you request multiport meter boxes and include the cost of meter installation. Additional charges apply for the provision of meters (see 4.6.6).

| Multiport Box | | Charge – per box |
|----------------------|----------|-------------------------|
| 4 port | Standard | £821.00 |
| | Gunmetal | £926.00 |
| 6 port | Standard | £920.00 |
| | Gunmetal | £1,221.00 |

4.6.8 Common metering water metering arrangement for household premises

We may allow a group of individual household premises (typically an apartment block), to be supplied through a common water meter, subject to appropriate credit reference agency checks provided that:

- the owner, landlord or management company enters an agreement with us to pay all water services charges (including charges for surface water drainage and highway drainage services for periods of non-occupation) for the premises included in the group;
- the location of the common water meter is agreed with us;
- the plumbing arrangements for the premises included in the group are configured so that individual water meters, in accessible locations in communal areas, can easily be added if the agreement terminates for any reason in the future.

For houses subject to a common billing agreement with a common supply pipe, for charging purposes connection will be deemed to have been made at the point of connection of the common supply.

4.6.9 Self-lay connection - administration charge

A self-lay administration charge will be applied for each new self-laid service connection and meter installation completed by an SLP. This charge reflects the costs incurred in administration of new self-laid service connections (see 4.3.6).

4.6.10 New water connections – Water regulation approval

Where an inspection is required at a premises to confirm that plumbing works comply with the Fittings Regulations, there is no charge for the initial inspection. If works do not comply with the Fittings Regulations, a site visit charge (section 9.2) will be made for each re-inspection.

4.6.11 Temporary connection for building water

Charges for temporary building water supplies are payable upon application.

Temporary connections are 25mm and supply water during construction. The connection will be considered temporary for a maximum of twelve months, after which time it will either be disconnected or, upon request, be considered a permanent supply to a premises. Where a temporary supply is converted to a permanent supply, we will require the installation of a meter (see section 4.6.6) and infrastructure charges (see section 6) will be payable. Income offset may also become applicable (see section 7).

| | Includes | Charge |
|------------------------------|---|----------------|
| Temporary connection | 25mm connection to the water main and up to two metres of pipework. | £590.00 |
| Each additional metre | Unsurfaced | £61.00 |
| | Surfaced | £97.00 |

4.7 Water main diversions

Where diversion of a water main is required for your development, the following charges will apply. Mains diversions can only be carried out by us unless the diversion is within the boundary of the site and we agree that you can carry out the work.

Charges for diversions relate to recovery of costs reasonably incurred as a result of complying with the duty imposed by section 185(1) of the Act.

Where you ask us to revise a quotation, a re-quotation fee is payable.

4.7.1 Mains diversion application fee

Diversion application fees are payable upon application.

| | Includes | Charge |
|--|---|----------------|
| Mains diversion application fee | Processing of application, scheme design, design drawing, confirmation of fixed price and a single site visit | £287.00 |
| Mains diversion re-quotations fee | Processing application, producing quotation and design drawing | £84.00 |

On acceptance, additional charges are payable, as applicable;

4.7.2 Mains diversion administration fee

| | Includes | Charge |
|---------------------------|---|----------------|
| Administration fee | Management of customer acceptance, promotion of work to contractor and a construction visit | £230.00 |

4.7.3 Construction charges

Construction charges associated with water mains diversions are detailed in section 4.5.

Charges are payable before commencement of work.

4.8 Water asset abandonment

If it is necessary to abandon existing water mains or any of our apparatus, or you request that we carry out associated works, charges will apply.

Charges include the disconnection of the asset from the network. In the case of mains abandonments, the existing asset will not be removed.

| Work description | Size (mm) | Work description | Charge |
|--|-----------------------|-------------------------|------------------|
| Mains Abandonments (per branch removed from existing water network) | 50-160 | Unsurfaced | £1,059.00 |
| | | Surfaced | £1,734.00 |
| | 161-315 | Unsurfaced | £1,807.00 |
| | | Surfaced | £2,397.00 |
| Abandon chamber – stop tap, valve, meter | Up to 900 x 600 | Unsurfaced | £223.00 |
| | | Surfaced | £262.00 |
| | Larger than 900 x 600 | Unsurfaced | £391.00 |
| | | Surfaced | £528.00 |

4.9 Building over water assets

We do not allow water assets to be built over. Please refer to diversions (see 4.7).

5 OBTAINING SEWERAGE SERVICES FOR YOUR DEVELOPMENT

5.1 Sewer requisition

Requisition charges relate to work carried out by us in accordance with the duties imposed by sections 98(1) of the Act. They relate to the cost of providing site specific infrastructure necessary for the provision of public sewers.

If land owned by a third party stands between a new development site and the location of a public sewer, and agreement to cross this land cannot be reached by the developer and the third party, then under Section 98 of the Act, you may be able to requisition a new public sewer to cross the land.

Construction work may only commence once a design has been agreed and a legal agreement signed.

All charges related to sewer requisitions are payable upon design acceptance.

We do not make income offset payments with respect to sewerage connections.

5.1.1 S98 Application fee (including initial administration)

| | Includes | Charge |
|------------------------|---|----------------|
| Application fee | Technical check of your design and administration costs in relation to your application | £301.00 |

5.1.2 Legal fees in relation to sewer requisitions

| | Charge |
|--|----------------|
| Legal fee for a sewer requisition agreement | £567.00 |
| Legal fee for provision of an easement (per transaction) | £627.00 |

5.1.3 Construction charges

Indicative construction charges can be calculated using the sewerage construction rates as shown in section 10.

On application, we will provide a budget estimate based on the parameters of your development.

5.2 Estimated value of works

In order to calculate security and processing fee values for sewer diversions carried out by a developer (see 5.3.2) and security values and processing fee for sewer adoptions (see 5.6.4 & 5.6.3), the estimated value of works must be calculated.

The value should be calculated using tables in section 11 including values for the applicable items for your development;

- Pipe size
- Box culvert
- Manholes
- Lateral drains
- Flow control devices
- Pumping station
- Sewer abandonment
- Manhole abandonment

5.3 Sewer Diversion

Charges for diversions relate to recovery of costs reasonably incurred as a result of complying with the duty imposed by section 185(1) of the Act.

Under Section 185 of the Water Industry Act 1991, a builder or developer can request that a public sewer is altered or removed to allow a site to be improved.

Where a sewer needs to be diverted, and a suitable route has been agreed with us, two options are available:

- The developer carries out the diversion under a legal agreement; or
- We carry out the diversion.

All charges related to sewer diversions are payable upon design acceptance.

5.3.1 Legal fee (letter of agreement)

| | Charge |
|---|----------------|
| Legal fee for a sewer diversion agreement – applies where a diversion is carried out by a developer | £579.00 |
| Legal fee for provision of an easement (per transaction) | £627.00 |

5.3.2 Diversions carried out by a developer

Sewer diversions may only be carried out by a developer where they are not deemed critical assets by us.

Where a sewer diversion is carried out by a developer, charges will apply for the design assessment and inspection of the work.

| | Includes | Charge |
|------------------------|--|----------------|
| Application fee | Administration costs for processing your application | £301.00 |

To calculate the estimated value of works see sections 5.2 & 11.

| | Includes | Charge |
|---|---|---|
| Technical assessment fee (where the design for the diversion is provided by the developer) | Engineering assessment, acceptance of the design and inspection of the work | 5% of estimated value of works |
| Security/deposit | Bond provided by applicant via either 3 rd party surety provider or cash deposit | 100% of estimated value of works |

Note: 80% of security is released once we confirm that work is carried out to the required standard. The remaining value will be released upon sewer adoption.

Where you choose to pay a cash deposit, interest will be payable at a rate of interest fixed by the Water Services Regulation Authority (Ofwat) for any amounts of 50p or more held for longer than three months.

Section 185 re-submission fee may apply if a design does not meet our engineering standards.

| | |
|---|---------------|
| Section 185 re-submission fee for re-design or inaccurate/repeat submissions (per hour) | £34.00 |
|---|---------------|

5.3.3 Diversions carried out by us

Where you request that we carry out a sewer diversion the following charges will apply.

This will usually be the case when the diversion affects a critical asset.

| | Includes | Charge |
|--|--|----------------|
| Sewer diversion application fee | Technical review of your application, and administration costs for processing your application | £301.00 |

5.3.4 Construction charges

Indicative construction charges can be calculated using the sewerage construction rates tables (see 10) and include items as stated. Sewer closure is not included in this rate (see 5.5).

On application, we will provide a budget estimate based on the parameters of your development.

5.4 New connections to the public sewer

We will usually allow a developer to carry out a sewer connection following an application under section 106 of the Act.

We reserve the right to make the connection under section 107 of the Act if required.

Charges relating to connections to the public sewer are payable upon submission of application.

Infrastructure charges will also apply to all new sewerage connections (see 6.1). Where applicable, infrastructure credit will be applied (see 6.4.1).

5.4.1 Connections made by a developer

Permission must be obtained from us for any new direct or indirect connection to the public sewer to ensure a connection is made safely. Once permission has been obtained, and the work has been carried out, we may inspect the work on the public sewer to make sure that it is carried out satisfactorily and to our standards.

Charges for each new connection to the public sewer includes administration and assessment of the application to ensure the proposed work meets our standards, and any necessary inspection of completed work.

| | Includes | Charge |
|--|--|----------------|
| Processing fee - developer connection | Administration and assessment of the application, site inspection of completed connection (where required) | £188.00 |

5.4.2 Connections made by us under section 107 of the Act

Charges as detailed in the sewerage construction tables (see 10) apply where we make a sewer connection under section 107 of the Act.

| | Includes | Charge |
|-----------------------------|-------------------------|---------------------------------|
| Construction charges | Design and construction | See tables in section 10 |

These charges are not applicable where sewers are built under a requisition (see 5.1) or are offered for adoption (see 5.6).

5.5 Sewer abandonment

A sewer abandonment may be required when a sewer is taking no flow and needs to be permanently disconnected from the rest of the network.

If a sewer to be abandoned is taking flow, you will need to apply for a sewer diversion (see 5.3).

5.5.1 Sewer abandonment application fee

Charges are payable upon application.

| | Includes | Charge |
|--|---|----------------|
| Application fee – closures up to 100m | Sewer abandonment of up to 100 metres, administration costs, engineering assessment and site inspection | £191.00 |
| Application fee – closures over 100m | Sewer abandonment of over 100 metres, administration costs, engineering assessment and site inspection | £309.00 |

5.6 Adoptions of Sewers and disposal works

Adoption charges relate to site specific charges in respect of section 104 of the Act.

If you are proposing adoption of assets, we encourage you to discuss this with us when you make a pre-development enquiry.

Unless otherwise stated, charges are payable upon design acceptance.

5.6.1 S104 Application fee (including initial administration)

An application fee is payable on submission of a section 104 application.

| | Includes | Charge |
|---------------------------------------|--|------------------|
| Sewer adoption application fee | A fee for processing your application, technical review and administration costs in relation to your application | £1,163.00 |

Note: Application fees are deducted from the technical assessment fee if planned scheme is progressed.

5.6.2 S102/104 - Legal fees

| | Charge |
|--|----------------|
| Legal Fee for a sewer adoption | £579.00 |
| Legal fee for transfer of land or provision of an easement (per transaction) | £627.00 |

5.6.3 S102/S104 Technical/ inspection fee (including final administration)

A processing fee is payable where sewers are offered for adoption.

| | Includes | Charge |
|-----------------------|---|---|
| Processing fee | Engineering assessment and acceptance of design, site inspection fees | 2.5% of estimated value of works |

5.6.4 S104 Security

For calculation of estimated value of works, see sections 5.2 & 11.

| | |
|--|--|
| Security - sewers | 10% of estimated value of works |
| Security – pumping station | 15% of estimated value of works |
| Note: The security is released on adoption of the asset. If you choose to pay a cash deposit, interest will be payable at a rate of interest fixed by the Water Services Regulation Authority (Ofwat) for any amounts of 50p or more held for longer than three months. | |

5.6.5 Other charges in relation to sewer adoptions

| | Charge |
|--|------------------|
| Installation and commissioning of United Utilities built telemetry outstation (required in pumping stations proposed for adoption) | £6,755.00 |
| Configuration and commissioning of developer/owner built telemetry outstation (required in pumping stations proposed for adoption) | £4,636.00 |
| Section 104 re-submission fee for minor re-design or inaccurate/repeat submissions (per hour) | £34.00 |
| Section 104 re-submission fee for complete re-design from applicant, will be charged at initial processing fee as at redesign | £1,163.00 |

5.6.6 Adoption of disposal works

| For all applications | Charge |
|---|--|
| Legal fee for agreement – payable upon application | £579.00 |
| Legal fee for transfer of land or provision of an easement (per transaction) - payable upon application | £627.00 |
| Installation and commissioning of United Utilities built telemetry outstation | Recovery of direct and indirect costs |
| We will recover all costs incurred associated with investigation, administration, installation and commissioning | |
| Configuration and commissioning of developer/owner built telemetry outstation | Recovery of direct and indirect costs |
| We will recover all costs incurred associated with investigation, administration, installation and commissioning | |
| Processing fee (to be paid before first site inspection) | Recovery of direct and indirect costs |
| We will recover all costs incurred associated with engineering assessment, acceptance of design, investigation, administration and inspection | |

5.7 Building over sewers

If you are planning any type of development, building something new or extending an existing building, you should check there is nothing underground that could be affected e.g. sewerage pipes. Our pre-development enquiry service can assist you with this.

If you want to build over or close to one of our public sewers or lateral drains (this usually means within three metres), you may need our approval, even if they are located on your land. More information about this can be found at:

[unitedutilities.com/builders-developers/homeowner/building-over-a-public-sewer](https://www.unitedutilities.com/builders-developers/homeowner/building-over-a-public-sewer)

Where we agree in principle to a build over agreement the following charges apply.

5.7.1 Application fee

Application fees are payable upon agreement in principle.

| | Includes | Charge |
|------------------------|--|----------------|
| Application fee | Administration costs in relation to your application, technical assessment and site inspection | £153.00 |

5.7.2 Legal fees in relation to building over sewers

These fees will be payable when draft legal agreements are issued.

| | Charge |
|--|----------------|
| Legal fee - agreement for household premises | £380.00 |
| Legal fee - agreement for non-household premises | £536.00 |

6 INFRASTRUCTURE CHARGES

6.1 Introduction

Infrastructure charges are payable in accordance with section 142-146(2) of the Act inclusive, Conditions C and D of our Instrument of Appointment and this part of our charges scheme, when premises become connected for the first time to a water supply and sewerage system for domestic purposes.

The principle of infrastructure charges recognises that every new connection imposes an additional demand on the overall capacity of the water supply and sewerage systems, and eventually those systems will need to be enlarged. Infrastructure charges are used to cover the extra demand on our existing network away from a development site.

Infrastructure charges have been set based on our latest forecast of the network reinforcement investment required as a result of new developments and our adjusted forecast new connection volumes over the same five year period.

This approach ensures that the infrastructure charges are set at an appropriate level each year based on the latest estimate of the investment required and the number of new connections placing additional demand on the network over the same period.

Infrastructure charges for 2020/21 have been calculated using forecast data for the following five years:

| | | Forecast (Price base 2017/18 CPIH adjusted) | | | | | Total |
|----------|---|---|---------|---------|---------|---------|---------|
| | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | |
| Water | Infrastructure network reinforcement expenditure (£M) | 7.980 | 8.059 | 8.138 | 8.217 | 8.298 | 40.692 |
| | New residential and business properties connected | 25,544 | 26,695 | 27,845 | 28,995 | 30,144 | 139,223 |
| Sewerage | Infrastructure network reinforcement expenditure (£M) | 5.797 | 5.854 | 5.911 | 5.969 | 6.027 | 29.557 |
| | New residential and business properties connected | 25,033 | 26,162 | 27,288 | 28,415 | 29,541 | 136,439 |

When calculating the Infrastructure charge forecast new connection volumes also need to be adjusted to take into account the following assumptions:

- The number of infrastructure charges levied for water and sewerage are typically 6% lower than the total connections reported due to the application of infrastructure credits (previous site use in the last five years).
- Assumptions on take up of sustainable schemes (discounted infrastructure charge), which also reduce network reinforcement expenditure.
- The latest view of connection volumes.

These charges need to be paid by anyone who wishes to build or develop premises where a connection is made either directly or indirectly to our existing network.

These charges do not include costs related to the physical connection (see 4.5.1 & 5.4).

Separate charges (shown below) are payable for water and sewerage connections.

| | |
|---------------------------------------|----------------|
| Water infrastructure charge | £302.00 |
| Sewerage infrastructure charge | £279.00 |

New connections made to a water main or public sewer that was provided as a requisition under s41 or s98 of the Act between 1991 and April 2018 will be charged infrastructure charges in accordance with licence condition C. These charges are known as legacy infrastructure charges and are detailed below.

| | |
|--|----------------|
| Legacy water infrastructure charge | £302.00 |
| Legacy sewerage infrastructure charge | £279.00 |

Where existing premises are connected to the network for the first time, the charge can be paid in 12 equal annual instalments at a rate of interest fixed by the Water Services Regulation Authority (Ofwat).

Infrastructure charges are payable when a water or sewerage connection for domestic purposes is made to premises that have not previously received the service, or where premises are split creating new premises or where a site is otherwise redeveloped.

If a connection is made without our authorisation, we may recover the infrastructure charge(s) from you.

6.2 Infrastructure charges for NAV developments

Where a NAV enters into a bulk supply agreement with us they will be liable for infrastructure charges in relation to newly connected properties in their area. Details of infrastructure charges will be documented in the bulk supply and/or discharge agreement as appropriate.

6.3 Infrastructure charges for sustainable developments

A reduced rate will apply to infrastructure charges for developments which meet specified qualifying conditions.

Where you believe you are eligible for this discounted rate, you should apply when you make an application for water supply services or sewerage services.

| | | |
|---------------------------------------|---|---------------|
| Water Infrastructure charge | Where you can demonstrate that properties are built to use a potential consumption of 110 litres per person per day or less, using methodologies as stated in the Building Regulations 2010 (Reg 36 (2); part G2) | £30.00 |
| Sewerage Infrastructure charge | Where properties are built with no surface water connection to the existing public sewer Evidence of surface water removal needs to be provided as part of the technical approval submission | £28.00 |

Further detail can be found on our website.

6.4 Calculation of the infrastructure charge

One infrastructure charge for water and one for sewerage will be made for each premises benefitting from a connection, except in the case of the following when the infrastructure charge will be multiplied by the relevant multiplier:

- houses subject to a common billing agreement with a common supply pipe (see 4.6.8);
- non-household premises served by a supply pipe larger than a 25mm external diameter.

Income offset will be paid in line with the water infrastructure charge, i.e. an income offset will be provided for water each infrastructure charge levied.

6.4.1 Infrastructure credits

New premises that are built on a site that was previously connected for either water or sewerage services within the previous five years may be given a reduction in infrastructure charges.

Where a site is developed or redeveloped, an infrastructure credit, equivalent to an infrastructure charge (water or sewerage as applicable) will be applied for each water or sewerage connection on the site at any time in the period of five years before the development or redevelopment began.

| Previous use | Property | Infrastructure credit |
|---------------------------|--------------------|------------------------------|
| Household premises | Household premises | 1 |

Where the premises were previously non-household premises, infrastructure credit may be calculated as a domestic equivalent and will be based on the meter size as detailed in the table below. Where the previous site use consisted of a sewerage connection only, we will estimate the applicable meter size.

| Previous use | Meter size | Infrastructure credit equivalent |
|-------------------------------|---------------|----------------------------------|
| Non-household premises | 15-20mm meter | 1 |
| | 25mm meter | 3 |
| | 40mm meter | 6 |
| | 50mm meter | 25 |
| | 80mm meter | 40 |
| | 100mm meter | 64 |
| | 150mm meter | 160 |

Where the previous site use consisted of a surface water connection only, the sewerage infrastructure credit will be calculated based on the number of premises built on the area of land served by that connection.

Where the number of infrastructure credits exceeds the number of infrastructure charges, the infrastructure charge will be zero.

6.5 Relevant multiplier for calculation of Infrastructure charge

The relevant multiplier, used in the calculation of infrastructure charges is calculated as follows:

Each water fitting or appliance within the premises is assigned a loading unit according to the table below.

These loading units are added together and the result divided by 24 to give the relevant multiplier. If the result of this division is less than or equal to one then the relevant multiplier is one. The relevant multiplier may be expressed as a decimal as well as a whole number.

| Water fitting | Loading units |
|---|----------------------|
| WC flushing cistern | 2 |
| Wash basin in a house | 1.5 |
| Wash basin elsewhere | 3 |
| Bath (tap nominal size up to 20mm) | 10 |
| Bath (tap nominal size larger than 20mm) | 22 |
| Shower | 3 |
| Sink (tap nominal size up to 15mm) | 3 |
| Sink (tap nominal size larger than 15mm) | 5 |
| Spray tap | 0.5 |
| Bidet | 1.5 |
| Domestic appliance – see 3 rd note below (subject to a minimum of six loading units per house) | 3 |
| Communal or commercial appliance | 10 |
| Any other water fitting or outlet (including a tap but excluding a urinal or water softener) | 3 |

Notes

- Any fitting includes reference to any plumbing, outlet, dedicated space or planning or other provision for that fitting;
- A bath includes a whirlpool or a Jacuzzi;
- "Domestic appliance" means an appliance (including a dishwasher, a washing machine and waste disposal unit) in a house and "communal or commercial appliance" means an appliance (including a dishwasher, a washing machine and a waste disposal unit) elsewhere than in a house (including in communal facilities).

Loading units are added together and the result divided by 24. If the result of this division is less than or equal to one then a single infrastructure charge is payable for water and/or sewerage. If the result is more than one then this figure is multiplied by the amount of the infrastructure charge to determine the amount payable.

In any calculation a minimum of six loading units will be included for each house for domestic appliances. In the case of any premises with only a sewerage connection and no water fittings, the relevant multiplier will be one.

7 INCOME OFFSET

An income offset allowance is made against the infrastructure charge to recognise future income where a new connection is made, either directly or indirectly to our existing water network in order to provide water for domestic purposes, including water used for domestic purposes at non-household premises.

Income offset will be paid in line with the water infrastructure charge, i.e. an income offset will be provided for each water infrastructure charge levied.

The income offset (less any applicable infrastructure charges) will be provided when premises are connected for the first time to our water network.

We do not make income offset payments in respect of sewerage connections.

Income offset is not applicable to water used for non-domestic purposes.

7.1 Calculation of income offset

An income offset allowance is made for each premises benefitting from a water connection, except in the case of the following when the per plot allowance will be multiplied by the relevant multiplier:

- houses subject to a common billing agreement with a common supply pipe (see 4.6.8);
- non-household premises served by a supply pipe larger than a 25mm external diameter.

| | Per plot constructed |
|----------------------|-----------------------------|
| Income offset | £751.00 |

The fixed allowance per plot is based on the total income offset value required to ensure that the balance of revenue recovered from developers and other customers is maintained. In calculating the value we have used our projections of the number of expected income offsets applicable based on our forecast connection volumes and any adjustments required to maintain the balance of revenue recovered from developers.

Where the income offset is calculated by means of the relevant multiplier, the income offset may be expressed as a decimal or a whole number.

7.2 Income offset for NAV developments

Where a NAV enters into a bulk supply agreement with us, details of income offset will be documented in the bulk supply agreement.

7.3 Water mains laying schemes agreed prior to April 2020

For water main laying schemes (including water main adoptions) agreed prior to 01 April 2020, any income offset payment (or where applicable asset payment) will be applied based on the charges scheme applicable in the charging year that the agreement was

made. For such schemes where any subsequent connections occur after 01 April 2020 (and hence generate an infrastructure charge) we will not provide for an income offset against those infrastructure charges, as the developer customer will already have received the appropriate income offset (or where applicable asset payment) in the prior years.

8 WATER USED DURING DEVELOPMENT

8.1 Temporary connection for building water

Charges apply at the point of connection for temporary building water supplies (see 4.6.11).

8.2 Building water charges

We will normally charge per unit for building water based on the number of houses or premises to be built on a site (up to 63mm, connections) unless we determine the temporary connection should be metered, or you ask for it to be metered.

Any premises constructed with a connection larger than 63mm will require a metered building water connection.

| Premises supplied | Charge |
|--|-----------------------------------|
| Premises with a connection up to and including 63mm | £27.50 per unit |
| Any premises that we determine should be metered, or you ask to be metered | Standard measured charges* |

*This charge is made by United Utilities wholesale services to the consumers chosen retailer if applicable. For details of end user charges, please consult your retailer.

9 MISCELLANEOUS

9.1 Traffic management

Where additional costs are payable as a result of compliance with Traffic Management Act 2004 these will be payable in addition to any standard charges. Examples of when these charges may apply include working in the highway, or where a road closure is required.

If additional costs are incurred as a result of your actions (e.g. extension charges), these will be payable by you.

All charges are payable on connection unless otherwise stated.

9.1.1 Temporary traffic lights

| | Delivery & collection, set up & dismantle installation | Charge per day |
|---|---|-----------------------|
| 3 way temporary traffic lights | £348.00 | £36.00 |
| 4 way temporary traffic lights | £451.00 | £43.00 |
| Includes compliance with all requirements of Traffic Management Act 2004 - chapter 8 (up to 60 mph) | | |

9.1.2 Closure/diversion

| | Charge per week |
|--|------------------------|
| Road closure and diversion and/or lane closure up to 40mph, to comply with instruction from Employer and/or Street Authority; up to and including 40 mph, not exceeding 1 mile diversion route. Temporary Traffic Regulation Order & council fees for road closures are in addition to this charge and can be found in 9.1.3 | £557.00 |

9.1.3 Other traffic management charges

For the purposes of the following table, the working day is Mon-Friday 8am – 8pm (excluding Bank Holidays).

| | In working day | Outside working day (uplift) |
|---|-----------------------|-------------------------------------|
| Provision of appropriate traffic management operatives and/or vehicles (per day) | £599.00 | £299.00 |
| Miscellaneous traffic management services - pre-night cones / bus stop relocation / pre warn up to 20 properties/site maintenance (per service) | £181.00 | £91.00 |

| | Charge |
|---|------------------|
| Upfront site survey , Auto Cad drawings and submission of drawing to allow road space to be granted | £251.00 |
| Temporary Traffic Regulation Order road closure | £2,016.00 |
| Parking bay suspension | £39.00 |
| Bus stop suspension | £224.00 |
| Pedestrian crossing suspension | £392.00 |
| Parking permit | £67.00 |
| Temporary lights for Temporary Traffic Regulation Order | £426.00 |
| Traffic light suspension (Bag off lights) | £448.00 |

9.2 Site visit charges

A site visit charge will apply where you request an additional site visit for any purpose, charges are payable following the site visit

Abortive site visit charges will also apply where we are unable to carry out a scheduled activity.

This could be for reasons such as, but not limited to:

- we are unable to access site;
- obstruction preventing work (e.g. scaffolding or skips);
- re-inspection of customer pipework;
- customer not ready.

| | |
|-------------------------------|---------------|
| Site visit charge (per visit) | £76.00 |
|-------------------------------|---------------|

Site visit charges will not be charged if 24 hours' notice of cancellation is given.

9.3 Trial holes

Where we determine trial holes are required, or you request trial holes, charges will apply. The charge includes all excavation, backfilling and surface reinstatement. A trial hole shall be of a suitable size, depth and nature required to carry out the investigation.

| | Work description | Charge |
|---|-------------------------|----------------|
| Trial hole – per m3 of excavation (minimum 1m3) | Unsurfaced | £193.00 |
| | Surfaced | £288.00 |

Charges are payable before the work is carried out.

9.4 Fire Hydrants

Where appropriate, in accordance with sections 57 and 58 of the Act, standard charges will be payable for the installation, removal or maintenance of a fire hydrant.

| Repair, installation and maintenance | Charge |
|---|-------------------------|
| Category 1 | |
| a) Repairs effected without disturbance to the original surface (no dig) | £302.82 |
| b) Repairs effected by excavation from the original surface up to the cover and frame depth level, including replace lid and/or re-set cover and frame including permanent reinstatement (any surface category) | £466.13 |
| Category 2 | |
| a) Repairs involving excavation below the original surface i.e. greater depth than category 1(b) | £689.74 |
| b) Complete hydrant replacement, and permanent reinstatement upon completion (any surface category) | £1,169.82 |
| c) Complete hydrant removal, and permanent reinstatements upon completion (any surface category) | £1,020.60 |
| d) Installation of fire hydrant including associated pipework, connection, valves, chamber, cover and frame, permanent reinstatements (any surface category) (mains over 100mm up to 150mm) | £1,213.07 |
| Mains over 150mm | Quote on request |
| A quote will be based on recovering all costs incurred associated with investigation, administration, statutory noticing and repair/installation | |
| Category 3 | |
| a) Relates to work involving the following activities: adoption including install/replace marker post(s), plates and numerals | £311.31 |

We reserve the right to recharge the costs of Highways Authority permits associated with the repair, installation and maintenance of fire hydrants

| | |
|--|----------------|
| Where we can resolve the issue during the initial assessment the following charge will apply | £116.40 |
|--|----------------|

9.5 Excavation through rock or artificial hard material

Where excavation through rock or artificial hard material (e.g. concrete) is required, an additional charge of **£116.00** per cubic meter excavated will apply.

9.6 Pressure testing and Sampling

Where you ask us to carry out a pressure test and/or bacteriological test on the mains or services you have laid, or where we need to undertake testing to take over an existing supply the charges detailed below will be applied when you ask us to carry out the work.

| | Work description | Charge |
|--------------------------------------|-----------------------------|---------------|
| Mains and service connection testing | Pressure test (per metre) | £12.00 |
| | Bacteriological test (each) | £76.00 |

9.7 Demobilisation/Remobilisation charges

An additional unplanned demobilisation/remobilisation charge will apply where we are unable to continue construction due to changes to the agreed programme of work. Such unplanned changes may be at your request.

Charges are payable before any work will be rescheduled.

| | |
|--------------------------------------|------------------|
| Demobilisation/remobilisation charge | £1,126.00 |
|--------------------------------------|------------------|

9.8 Repairs for damage

Charges will be made for repairs for damage to our assets including, where appropriate under section 174 of the Act, to whoever is responsible for damaging them.

We will recover all costs incurred (UU and contractor) associated with investigation, administration, statutory noticing, repair and reinstatement of the asset. We will also recover any other costs we incur as a result of the damage.

9.9 Illegal connections

Where we discover an illegal connection to our water mains we will discuss rectification of this with you, and would normally expect you to correct at your cost. If we need to rectify this on your behalf we would charge for this.

We will recover all direct and indirect costs incurred associated with investigation, administration and rectification (including materials).

If you deny us access to complete this work we may use legal processes to advance the rectification, and you may be liable for any costs incurred by us, including associated legal costs

We may decide to prosecute for any illegal connection to our water mains regardless of the stage in the rectification process we are in, and you may be liable for any costs incurred by us, including associated legal costs.

9.10 Defective fittings

Under sections 73 to 75 of the Act we have a duty to enforce the Fittings Regulations and have power to take steps to prevent contamination, waste and misuse of water, you may be charged any costs associated with this work. We will serve a defective fittings notice on any premises for the repair of or disconnection of any apparatus found to be defective

(including underground supply pipes). Where a repair or disconnection of apparatus is not made within the timescales we specify, the repair or disconnection will be carried out by us and you will be charged the cost of the work.

Where necessary, we may disconnect the supply under section 75 of the Act. Where this is the case, we reserve the right to recover any costs from you.

We will recover all direct and indirect costs incurred associated with investigation, disconnection and administration.

9.11 Replacement of lead service pipes

We operate a scheme to replace lead service pipes free of charge. Not all properties are suitable for this scheme and it is subject to acceptance. If your application is accepted we will replace the lead pipes that we are responsible for and connect the new supply pipe to our water main. Further detail and an application form can be found at:

unitedutilities.com/lead-pipes

9.12 Water drawn from hydrants

Water may only be drawn from hydrants in accordance with our standpipe hire scheme, unless otherwise agreed with us. Only metered standpipes hired from us will be allowed to connect to our network.

Charges relating to water drawn from hydrants are set out in the United Utilities wholesale water charges scheme (section 6.8).

unitedutilities.com/wholesale-services/wholesale-charges

10 CONSTRUCTION RATES - SEWERAGE DEVELOPMENTS

The rates quoted in this section are indicative, and are provided to assist you with estimating charges.

On application, we will provide an estimate based on the parameters of your development.

| | Includes |
|-----------------------------|---|
| Construction charges | <ul style="list-style-type: none"> • Supply and handling of materials • Cutting and jointing of pipes and fittings • Set up costs and temporary works • All pipe protection, supply of protected materials • Disposal of all surplus material and waste (excluding Hazardous Waste) • Backfilling • Surface reinstatement • Site clearance |

10.1 Gravity sewers

10.1.1 Gravity sewer connections – per connection

| Size (mm) | Grassland | Suburban | Urban |
|------------------|-------------------|-------------------|-------------------|
| Up to 225 | £2,234.00 | £2,652.00 | £2,786.00 |
| 226 - 300 | £2,700.00 | £3,117.00 | £3,251.00 |
| 301 - 400 | £2,821.00 | £3,240.00 | £3,374.00 |
| 401 - 525 | £4,974.00 | £5,407.00 | £5,561.00 |
| 526 - 600 | £7,819.00 | £8,386.00 | £8,586.00 |
| 601 - 700 | £8,081.00 | £8,649.00 | £8,849.00 |
| 701 - 800 | £9,178.00 | £9,804.00 | £10,024.00 |
| 801 - 1000 | £10,096.00 | £10,784.00 | £11,027.00 |

10.1.2 Gravity sewers construction – per metre

| Size (mm) | Depth | Grassland | Suburban | Urban |
|------------|-------------|-----------|-----------|-----------|
| Up to 225 | Up to 2.5 m | £485.00 | £880.00 | £1,048.00 |
| | 2.6 – 4.5 m | £832.00 | £1,327.00 | £1,518.00 |
| | 4.6 – 6.5 m | £1,249.00 | £2,145.00 | £2,407.00 |
| 226 - 300 | Up to 2.5 m | £574.00 | £988.00 | £1,143.00 |
| | 2.6 – 4.5 m | £926.00 | £1,453.00 | £1,680.00 |
| | 4.6 – 6.5 m | £1,367.00 | £2,316.00 | £2,642.00 |
| 301 - 400 | Up to 2.5 m | £713.00 | £1,035.00 | £1,235.00 |
| | 2.6 – 4.5 m | £1,032.00 | £1,499.00 | £1,742.00 |
| | 4.6 – 6.5 m | £1,527.00 | £2,494.00 | £3,020.00 |
| 401 - 525 | Up to 2.5 m | £789.00 | £1,252.00 | £1,426.00 |
| | 2.6 – 4.5 m | £1,187.00 | £1,710.00 | £1,981.00 |
| | 4.6 – 6.5 m | £1,778.00 | £2,761.00 | £3,506.00 |
| 526 - 600 | Up to 2.5 m | £1,019.00 | £1,354.00 | £1,555.00 |
| | 2.6 – 4.5 m | £1,351.00 | £1,881.00 | £2,187.00 |
| | 4.6 – 6.5 m | £1,996.00 | £2,990.00 | £3,843.00 |
| 601 - 700 | Up to 2.5 m | £1,172.00 | £1,820.00 | £2,171.00 |
| | 2.6 – 4.5 m | £1,555.00 | £2,383.00 | £2,907.00 |
| | 4.6 – 6.5 m | £2,244.00 | £3,249.00 | £4,208.00 |
| 701 – 800 | Up to 2.5 m | £1,246.00 | £2,000.00 | £2,393.00 |
| | 2.6 – 4.5 m | £1,706.00 | £2,670.00 | £3,207.00 |
| | 4.6 – 6.5 m | £2,528.00 | £3,672.00 | £4,689.00 |
| 801 - 1000 | Up to 2.5 m | £1,532.00 | £2,350.00 | £2,789.00 |
| | 2.6 – 4.5 m | £1,965.00 | £2,953.00 | £3,571.00 |
| | 4.6 – 6.5 m | £2,857.00 | £4,227.00 | £5,357.00 |

10.2 Manholes

| Manhole diameter (mm) | Depth | Grassland | Suburban | Urban |
|----------------------------------|--------------|-------------------|-------------------|-------------------|
| 1200 (up to 225mm pipe) | Up to 2.5 m | £6,913.00 | £8,872.00 | £9,441.00 |
| | 2.6 – 4.5 m | £12,292.00 | £14,947.00 | £15,517.00 |
| | 4.6 – 6.5 m | £20,835.00 | £23,926.00 | £25,090.00 |
| 1350 (226-400mm pipe) | Up to 2.5 m | £7,702.00 | £9,965.00 | £10,635.00 |
| | 2.6 – 4.5 m | £13,537.00 | £16,463.00 | £17,154.00 |
| | 4.6 – 6.5 m | £22,898.00 | £26,904.00 | £27,903.00 |
| 1800 (401-600mm pipe) | Up to 2.5 m | £10,636.00 | £12,585.00 | £13,599.00 |
| | 2.6 – 4.5 m | £18,004.00 | £20,532.00 | £21,880.00 |
| | 4.6 – 6.5 m | £27,193.00 | £31,704.00 | £32,684.00 |
| 2100 (601–700mm pipe) | Up to 2.5 m | £12,658.00 | £15,056.00 | £16,052.00 |
| | 2.6 – 4.5 m | £22,625.00 | £24,084.00 | £25,537.00 |
| | 4.6 – 6.5 m | £33,416.00 | £36,290.00 | £37,703.00 |
| 2400 (701-1000mm pipe) | Up to 2.5 m | £15,715.00 | £18,474.00 | £20,045.00 |
| | 2.6 – 4.5 m | £28,682.00 | £31,240.00 | £32,892.00 |
| | 4.6 – 6.5 m | £42,566.00 | £45,399.00 | £47,179.00 |

10.3 Pumped rising mains

10.3.1 Pumped rising main – construction (per metre)

| Pipe size (mm) | Depth | Grassland | Suburban | Urban |
|----------------|-------------|-----------|-----------|-----------|
| Up to 225 | Up to 2.5 m | £563.00 | £1,020.00 | £1,187.00 |
| | 2.6 – 4.5 m | £885.00 | £1,565.00 | £1,764.00 |
| | 4.6 – 6.5 m | £1,388.00 | £2,518.00 | £2,810.00 |
| 226 - 300 | Up to 2.5 m | £741.00 | £1,244.00 | £1,409.00 |
| | 2.6 – 4.5 m | £1,088.00 | £1,796.00 | £2,097.00 |
| | 4.6 – 6.5 m | £1,573.00 | £2,862.00 | £3,338.00 |
| 301 - 400 | Up to 2.5 m | £938.00 | £1,441.00 | £1,635.00 |
| | 2.6 – 4.5 m | £1,244.00 | £1,991.00 | £2,277.00 |
| | 4.6 – 6.5 m | £1,784.00 | £3,087.00 | £3,698.00 |
| 401 - 525 | Up to 2.5 m | £1,320.00 | £1,933.00 | £2,155.00 |
| | 2.6 – 4.5 m | £1,719.00 | £2,643.00 | £3,102.00 |
| | 4.6 – 6.5 m | £2,320.00 | £3,808.00 | £4,551.00 |
| 526 - 600 | Up to 2.5 m | £1,883.00 | £2,563.00 | £3,118.00 |
| | 2.6 – 4.5 m | £2,390.00 | £3,405.00 | £3,725.00 |
| | 4.6 – 6.5 m | £3,210.00 | £4,726.00 | £5,348.00 |

10.3.2 Connection to existing rising main (per connection)

| Size (mm) | Grassland | Suburban | Urban |
|-----------|------------|------------|------------|
| Up to 225 | £4,651.00 | £5,971.00 | £6,530.00 |
| 226 - 300 | £8,591.00 | £11,326.00 | £12,370.00 |
| 301 - 400 | £19,087.00 | £18,925.00 | £19,684.00 |
| 401 - 525 | £30,793.00 | £34,648.00 | £35,229.00 |
| 526 - 600 | £39,479.00 | £46,442.00 | £48,569.00 |

10.3.3 Thrust blocks

| Diameter (mm) | Charge – per thrust block |
|----------------------|----------------------------------|
| Up to 300 | £809.00 |
| 301 - 400 | £846.00 |
| 401 - 525 | £1,163.00 |
| 526 - 600 | £3,408.00 |

10.3.4 Valves

| Diameter (mm) | Charge – per valve |
|----------------------|---------------------------|
| Up to 225 | £2,530.00 |
| 226 - 300 | £3,764.00 |
| 301 - 400 | £8,015.00 |
| 401 - 525 | £14,035.00 |
| 526 - 600 | £22,125.00 |

11 RATES FOR CALCULATION OF ESTIMATED VALUE OF WORKS

11.1 Pipe size rates

Prices are per metre and apply to surface water, foul or combined sewers.

| Pipe diameter (mm) | Charge |
|----------------------|-----------|
| 150 | £161.00 |
| 225 | £192.00 |
| 300 | £197.00 |
| 375 | £238.00 |
| 450 | £271.00 |
| 525 | £293.00 |
| 600 | £335.00 |
| 750 | £390.00 |
| 825 | £472.00 |
| 900 | £581.00 |
| 1050 | £659.00 |
| 1200 | £661.00 |
| 1350 | £789.00 |
| 1500 | £920.00 |
| 1800 | £1,093.00 |
| 2100 | £1,436.00 |
| 2400 (over 3m depth) | £1,975.00 |

11.2 Pumping Station rates

| Size of pumping Station | Charge (per asset) |
|-------------------------|--------------------|
| 5 - 50 houses | £38,417.00 |
| 51 – 100 houses | £41,908.00 |
| 101 – 200 houses | £47,730.00 |
| 201 – 300 houses | £58,207.00 |
| More than 301 houses | £67,520.00 |

11.3 Sewer connection rates

| Sewer nominal diameter (mm) | Charge – per connection |
|-----------------------------|-------------------------|
| 150 | £794.00 |
| 225 - 300 | £907.00 |
| 375 - 600 | £1,430.00 |
| 750 - 900 | £1,850.00 |
| 1050 - 2400 | £2,773.00 |

11.4 Box culvert rates

| Nominal flow area (m2) | Charge – per box culvert |
|------------------------|--------------------------|
| 0.0 - 2.0 | £420.00 |
| 2.1 - 4.0 | £1,260.00 |
| 4.1 - 6.0 | £2,016.00 |
| 6.1 - 8.0 | £2,592.00 |
| 8.1 - 10.0 | £4,016.00 |

11.5 Manhole rates

| Diameter (mm) | Charge – per manhole |
|---------------|----------------------|
| Up to 1050 | £2,982.00 |
| 1200 | £3,280.00 |
| 1350 | £3,677.00 |
| 1500 | £4,074.00 |
| 1800 | £5,288.00 |
| 2100 | £6,465.00 |
| 2400 | £7,402.00 |
| 2700 | £12,928.00 |
| 3000 | £15,431.00 |
| 3600 | £32,809.00 |

11.6 Outfall pipe rates

| Description | Charge (per outfall) |
|--------------------------|----------------------|
| Outfall pipe 150 - 225mm | £2,445.00 |
| Outfall pipe 300 - 450mm | £6,752.00 |
| Outfall pipe 525 - 600mm | £10,861.00 |
| Outfall pipe 750 - 900mm | £17,613.00 |

11.7 Sewer abandonment rates

| Pipe diameter (mm) | Charge (per metre) |
|--------------------|--------------------|
| 150 | £9.00 |
| 225 - 300 | £12.00 |
| 375 - 450 | £20.00 |
| 525 - 600 | £28.00 |
| 750 | £41.00 |
| 825 - 900 | £57.00 |
| 1050 - 2400 | £116.00 |

11.8 Manhole abandonment rates

| Diameter (mm) | Charge – per manhole |
|---------------|----------------------|
| 1050 - 1200 | £513.00 |
| 1350 | £621.00 |
| 1500 | £686.00 |
| 1800 | £955.00 |
| 2100 | £1,031.00 |
| 2400 - 3600 | £1,289.00 |

11.9 Lateral drains - only applicable to S104

| | |
|------------------------------------|---------|
| Lateral drains (per lateral drain) | £816.00 |
|------------------------------------|---------|

11.10 Flow control device – only applicable to S104

| | |
|----------------------------------|-----------|
| Flow control device (per device) | £2,720.00 |
|----------------------------------|-----------|

11.11 Rising main - only applicable to S104 and S185

| | |
|--------------------------------|---------|
| Rising main length (per metre) | £120.00 |
|--------------------------------|---------|

12 EXAMPLES OF ADDITIONAL COSTS

The table below gives examples of additional costs which may apply in exceptional circumstances, as described in 13.1.

This is provided for illustrative purposes only, and is not an exhaustive list.

| Costs associated with | Includes items such as (but not limited to) |
|--|---|
| Crossings such as watercourses, railways and motorways | <ul style="list-style-type: none"> • Site survey • 3rd party cost • Legal agreements • Out of hours work |
| Invasive flora (e.g. Japanese knotweed, Himalayan Balsam) | <ul style="list-style-type: none"> • Site survey • Specialist removal/disposal costs |
| Ecological impacts | <ul style="list-style-type: none"> • Ecological surveys • Newt assessment and mitigation |
| Crossing third party land | <ul style="list-style-type: none"> • Site survey • Compensation for landowner(s) • Legal agreements |
| Land Purchase compensation | <ul style="list-style-type: none"> • Land compensation • Business owner compensation • Property owner compensation |
| Work near to water sources, bridges and other structures | <ul style="list-style-type: none"> • Site survey • 3rd party costs • Legal agreement • Out of hours work |
| Construction near other services (e.g. high pressure gas mains, overhead power cables) | <ul style="list-style-type: none"> • Site survey • 3rd party costs • Out of hours work |
| Work on strategic mains | <ul style="list-style-type: none"> • Branch connection of any size to an existing main larger than 315mm • Site survey • Network assembly on main larger than 315mm • Out of hours work |
| Construction of water main larger than 315mm | <ul style="list-style-type: none"> • Network assemblies • Site survey • Pipework and ancillaries • Out of hours work |

| | |
|---|--|
| Hazardous contaminated ground | <ul style="list-style-type: none"> • Survey costs • Disposal costs |
| Water assets at depths greater than 1.25 metres | <ul style="list-style-type: none"> • Dewatering • Health & safety considerations |
| Exceptional reinstatement costs | <ul style="list-style-type: none"> • Compliance with New Roads and Street Works Act 1991 |
| Access to working area | <ul style="list-style-type: none"> • Site survey • Temporary access roads |
| Site clearance and reinstatement | <ul style="list-style-type: none"> • Site clearance • Demolition of existing structures • Landscaping • Tree clearance |
| Exceptional ground conditions | <ul style="list-style-type: none"> • Ground stabilisation • De-watering |
| Security costs | <ul style="list-style-type: none"> • Fencing • Manning • patrols |
| Onsite booster station | <ul style="list-style-type: none"> • Site survey • Legal agreements • 3rd party costs |

13 GENERAL INFORMATION

13.1 Charges

Charges in this scheme reflect the costs associated with providing each service as stated.

Unless otherwise stated, the charges quoted in this scheme apply for works carried out during the business day under standard conditions. In other instances we reserve the right to charge on a basis of actual costs, provided you are notified accordingly prior to commencement of the work.

Miscellaneous charges are listed in section 9.

13.2 Charges for elements of work affected by exceptional circumstances

In exceptional circumstances, additional charges may apply to the fixed charges quoted in this charges scheme.

Where;

- The technical complexity of the work is high or the type of work required is bespoke or carried out infrequently, or;
- Third parties can legitimately recover their costs from companies and there is not a reasonable level of certainty of those costs in advance of connection work being undertaken, or;
- Third parties have rights to protect their assets or interests in a way that affects the construction method. The third parties' requirements are unknown upfront, or;
- The work is to be carried out on or close to land with particular environmental, historical or archaeological characteristics. These characteristics mean that specific measures are required during construction or reinstatement. The details of these measures may not be fully defined in advance of construction.

Examples of additional costs are included in section 12 for illustrative purposes.

In these circumstances, where it is possible to do so, we will provide a budget estimate comprising indicative charges for the elements of the work affected by the above and fixed charges where appropriate.

13.3 Timing of Payment

All charges are payable as stated. If you do not pay on time it will result in recovery action and you may need to pay additional cost because of this.

13.4 Value Added Tax (VAT)

All charges published in this scheme **exclude VAT**. VAT will be added to the published charge at the appropriate rate where required.

13.5 Traffic Management Act 2004

Charges as detailed in this charges scheme are inclusive of costs of two way temporary traffic lights where required.

Additional charges will be made for traffic management expenses where required (see 9.1).

13.6 Transitional arrangements

Details of transitional charging arrangements, where applicable, can be found on our website.

14 CONTACT US

You can contact us by the following methods:

Phone : Call us on 0345 072 6067

Email:

| | <u>Sewerage</u> | <u>Water</u> |
|------------------------------------|--|--|
| Drainage and pre-planning | wastewaterdeveloperservices@uuplc.co.uk | |
| Adoptions | SewerAdoptions@uuplc.co.uk | |
| Connection enquiries | wastewaterdeveloperservices@uuplc.co.uk | developerserviceswater@uuplc.co.uk |
| Self-lay provider enquiries | | selflay@uuplc.co.uk |
| NAV enquiries | NAVenquiries@uuplc.co.uk | NAVenquiries@uuplc.co.uk |

Post:

Written correspondence should be sent to: United Utilities Water Limited, Developer Services & Metering, 2nd Floor Grasmere House, Lingley Mere Business Park, Lingley Green Avenue, Warrington, WA5 3LP.

Further details can be found on our website:

unitedutilities.com/builders-developers

14.1 Further information

Further information on our services can be found on our website at:

[United Utilities.com/services/builders-developers/](https://unitedutilities.com/services/builders-developers/)

14.2 Disputes

If you have a query or complaint about any aspect of our service, please contact us in the first instance on 0345 072 6067.

We aim to deliver a high standard of service and to deal with complaints speedily and satisfactorily. We should reply to any written complaint within 10 working days. If we fail to do this we will make an automatic payment under the statutory Guaranteed Standards Scheme. This forms part of our standards of service that have been agreed with our regulator Ofwat.

If we receive a written complaint we will reply within 10 working days of receiving it. We will give you the name of the person owning your complaint, together with a telephone number should you wish to contact them to discuss any aspect of our response.

If you remain unhappy with our response we will escalate your complaint to one of our agents who has not been involved in your initial complaint who will carry out an independent review.

If you remain unhappy with our response following our two stage process:

14.2.1 Consumer council for water (CCWater)

If you remain unhappy with our response, CCWater will consider complaints about aspects of our services that are not in relation to charges. The type of complaints they will investigate include, but are not limited to complaints relating to our policies or processes, or complaints related to how we have handled your application.

CCWater are also able to provide advice and guidance about the connection charging regime. You can contact CCWater:

The Consumer Council for Water (CCWater) 1st Floor Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

Details can be found at: ccwater.org.uk/make-a-complaint/

If you remain unhappy with the outcome, you may be eligible to take your concerns to the Water Redress Scheme (WATRS) who can provide an independent binding decision.

14.2.1 Water Services Regulation Authority (Ofwat)

In accordance with sections 45(6A) of the Act, any disputes between us and any other person as to the charges set out in this scheme (with the exception of those detailed in 6.4.1) may be referred to the Water Services Regulation Authority (Ofwat) for determination.

The address is: Ofwat, Centre City Tower, 7 Hill Street, Birmingham, B5 4UA.

Details can be found at:

ofwat.gov.uk/regulated-companies/investigations/making-a-complaint/

14.2.2 Infrastructure charges

If you dispute the calculation of the infrastructure charge, you should contact us at DeveloperServicesWater@uuplc.co.uk.

If you remain dissatisfied with the decision, you can contact the Water Redress Scheme (WATRS) who can provide an independent binding decision.

Where infrastructure charges are applied under a previous charges scheme as part of transitional arrangements, disputes relating to the calculation of the relevant multiplier or the number or type of fittings on which the calculation is based, is determinable by the Water Services Regulation Authority (Ofwat).

15 PAYMENT

We reserve the right to recover bank charges and administrative costs resulting from invalid or dishonoured cheques, or credit cards.

We may require you to pay interest on overdue accounts; this is usually calculated at the rate of 4% above the base rate set by the Bank of England.

We accept payment by any of the methods below, and regularly review our payment methods;

12.1 Credit or Debit card

To make a payment by credit or debit card, please call us on 0345 0726067.

We do not accept payment by American Express.

12.2 BACS

Payment can be made via BACS Payment Schemes Limited (BACS) quoting the details below;

Bank: National Westminster Bank Plc

Sort code: **01-09-17**

Account No: **58934014**

Job Reference: the service order number, which can be found on your quotation.

12.3 Cheque

Cheques should be made payable to United Utilities Water Limited, and sent to;

United Utilities Water Limited, Sundry Billing, PO Box 1062, Warrington, WA5 3LP.

Cash or post-dated cheques should not be sent.

We only accept cheques from a bank licenced by the Financial Conduct Authority (FCA).

For the most up to date list of payment methods please refer to our website.

16 DEFINITIONS

A number of terms are used throughout this scheme; they normally have the following meanings:

The Act – the Water Industry Act 1991 (as amended).

Agreement – a legally enforceable contract between us and you. It covers the water or sewerage services that we agree to provide to you, and the commercial terms on which those services are provided.

Asset Payment – a payment made to the developer, SLP or new appointee in respect of that part of a new main used to supply water for domestic purposes. This definition applies only to water main laying schemes (including water main adoptions) agreed prior to April 2020.

Asset – any apparatus which forms part of our water or wastewater network.

Bond – a financial guarantee underwritten by a bank or Insurance company approved by us.

Branch connection – Installation of pipework into an existing water main allowing a new main to be connected to the existing water network

Building water – water used in the construction of premises, including testing of water fittings.

Business Day – 08:00 to 18:00 Monday to Friday, excluding Bank Holidays.

Chamber – a purpose built or manufactured compartment installed or constructed below ground level to house network apparatus.

The Company – United Utilities Water Limited – registered number 2366678.

Common billing agreement – an agreement between us and any person(s) or company who has agreed to pay measured charges for our services for two or more household or non-household premises supplied through a single water meter.

Common supply pipe – a water supply pipe that serves two or more premises.

Communication Pipe - any part of a service pipe which a water undertaker could be, or have been, required to lay under section 46 of the Water Industry Act 1991.

Connection – a connection to a network regulated by the Act and other relevant legislation through which you receive the benefit of one of our services.

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

Critical asset – an asset is deemed critical if an interruption of service could have a significant impact on customers.

Developer – person or company which is responsible for a development, or any person making an application for new water or sewerage connections.

Domestic purposes – as provided for under section 218 of the Act. Water used for drinking, washing, cooking, central heating and sanitary purposes.

Hazardous waste – defined by Hazardous Waste (England & Wales) Regulations 2005.

House – any building or part of a building (including a flat) occupied or likely to be occupied as a private dwelling.

Household premises – premises in any part of which a person has his home and whose principal use is a home and which may be identified as such in light of any eligibility guidance.

Income offset - a sum of money offset against water infrastructure charges in recognition of revenue likely to be received by us in future years for the provision of supplies of water to premises connected directly or indirectly to our water network.

Infrastructure charge – a water infrastructure charge and/or a sewerage infrastructure charge made by us for a water and/or sewerage connection for domestic purposes (see Condition C of our Instrument of Appointment and section 6 of this scheme).

In line meter – a water meter which is installed into a communication pipe or supply pipe by means of an inlet and outlet connection at each end of the meter.

Instrument of Appointment – is the Instrument of Appointment of the Company, then known as North West Water Limited as a water and sewerage undertaker dated 24 August 1989 (as updated).

Manifold meter – a water meter which is installed into a communication pipe or service pipe by means of a single threaded connection on the base of the meter.

NAV - a limited company which provide a water and/or sewerage service to customers in an area which was previously provided by the incumbent provider.

Network assembly – component such as a valve or washout which allows us to operate and maintain or facilitate the connection to the existing network.

New Appointment - a new appointment is made where a limited company is appointed by Ofwat to provide water and/or sewerage services for a specific geographic area. Once appointed the new appointee will take over responsibility for providing water and or wastewater services to that specific area.

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

Non-household premises – premises other than a household premises.

Non-domestic purposes – water use for any purpose other than domestic purposes.

Piece up – the act of connecting lengths of main together.

Plot – property to be connected to our water network This definition relates only to the calculation of an income offset (see section7) and may include a landlord supply.

Premises – includes any building or part of a building which is separately occupied or intended to be occupied and land or an interest in land.

Relevant multiplier – a number related to loading units for water fittings for the purpose of calculating income offset or infrastructure charges (see section 6.5).

Requisition – the laying of water or sewerage pipes and any other associated site specific infrastructure carried out by us, following serving of a requisition notice in accordance with the Act.

Self-lay – the laying of water pipes and associated infrastructure by approved self-lay providers in accordance with section 51a of the Act.

Self-lay provider (SLP) – an entity that carries out self-lay work with Water Industry Registration Scheme (WIRS) accreditation.

Service pipe - so much of a pipe which is, or is to be, connected with a water main for supplying water from that main to any premises as -

(a) is or is to be subject to water pressure from that main; or

(b) would be so subject but for the closing of some valve, and includes part of any service pipe.

Services – any service provided by us related to potable or non-potable water supply and foul drainage, surface water drainage, highway drainage and trade effluent.

Site specific - work on, or the provision of, water or sewerage structures or facilities located on a development as well as work to provide and connect a requested water main, sewer, communication pipe or lateral drain on, to or in the immediate vicinity of, the development.

Charges for site specific work relate to the provision of connection structures or facilities located on a development up to the nearest practical point on the existing network where the connecting pipework is of a nominal bore internal diameter no larger than that of our existing network. They do not refer to costs or work required as part of network reinforcement.

Sewerage services – any services provided by us related to the provision, alteration of sewerage and the reception, conveyance and treatment of sewage including surface water drainage and highway drainage.

Security – insurance to cover the failure to complete the drainage for a development scheme. It can be secured by a bond or cash deposit.

Water and sewerage undertaker – the Company appointed to carry out water and sewerage duties under the Act.

Water services charges – a charge or any combination of charges for water supply services or sewerage services or both.

Water supply – water supplied by us to you.

Water supply services – any services provided by us related to the provision, alteration or disconnection of a water supply.

We, us or our – United Utilities Water Limited (registered number 2366678) or our representative(s).

Water Industry Registration Scheme (WIRS) – a recognised accreditation scheme operated by Lloyd’s Register on behalf of water utility companies.

WRAS – Water Regulations Advisory Scheme.

You, your – the person(s) requesting the connection or service.

17 APPENDIX 1 WORKED EXAMPLES – STANDARD INDUSTRY SCENARIOS

Ofwat has published an expectation for water companies to publish worked examples of specified typical developments.

This section illustrates charges for these examples, including assumptions made where indicated*. In each example, for simplicity, it is assumed that there are no exceptional circumstances, miscellaneous charges or previous site use.

17.1 Single short connection example

| Description & assumptions | | |
|---------------------------|----------|--|
| Single Connection | Water | Connection to existing main No new mains required 25-32mm PE pipe Short connection – 4 metres surfaced 2 way lights required (included in standard rates)* |
| | Sewerage | Connection undertaken by the developer* No new sewers required |

Water

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref |
|---|--|----------|-------------|-----------------|--------------------|
| Water connection application fee (single) | | 1 | £80.00 | £80.00 | 4.6.1 |
| Water connection administration fee (single) | | 1 | £37.00 | £37.00 | 4.6.2 |
| Application & administration charges | | | | £117.00 | |
| Metered connection | 25mm surfaced service connection (Includes 2m of pipework and provision & installation of a meter) | 1 | £637.00 | £637.00 | 4.6.3 |
| Additional pipework | 25mm PE pipe (surfaced) | 2 | £97.00 | £194.00 | |
| Connection charges | | | | £831.00 | |
| Building water | | 1 | £27.50 | £27.50 | 8.2 |
| Water infrastructure charge | | 1 | £302.00 | £302.00 | 6.1 |
| Water infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 1 | -£751.00 | -£751.00 | 7.1 |
| Other charges | | | | -£421.50 | |
| Total water connection scheme charges | | | | £526.50 | |

Sewerage

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref |
|--|---------|----------|-------------|----------------|--------------------|
| Processing fee - developer connection | | 1 | £188.00 | £188.00 | 5.4.1 |
| Sewerage infrastructure charge | | 1 | £279.00 | £279.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage scheme charges | | | | £467.00 | |
| Total water and sewerage scheme charges | | | | £993.50 | |

17. 2 Single long connection example

| Description & assumptions | | |
|---------------------------|----------|--|
| Single Connection | Water | Connection to existing main No new mains required 25-32mm PE pipe Long connection – 4 metres surfaced, 4 metres unsurfaced 2 way lights required (included in standard rates)* |
| | Sewerage | Connection undertaken by the developer* No new sewers required |

Water

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|---|---|----------|-------------|------------------|---------------------|
| Water connection application fee | | 1 | £80.00 | £80.00 | 4.6.1 |
| Water connection administration fee (single) | | 1 | £37.00 | £37.00 | 4.6.2 |
| Application & administration charges | | | | £117.00 | |
| Metered connection (surfaced) | 25mm surfaced service connection (Includes 2m of pipework, provision & installation of a meter) | 1 | £637.00 | £637.00 | 4.6.3 |
| Additional pipework (surfaced) | 25mm PE surfaced pipe (m) | 2 | £97.00 | £194.00 | |
| Additional pipework (unsurfaced) | 25mm PE unsurfaced pipe (m) | 4 | £61.00 | £244.00 | |
| Connection charges | | | | £1,075.00 | |
| Building water | | 1 | £27.50 | £27.50 | 8.2 |
| Water infrastructure charge | | 1 | £302.00 | £302.00 | 6.1 |
| Water infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 1 | -£751.00 | -£751.00 | 7.1 |
| Other charges | | | | -£421.50 | |
| Total water connection scheme charges | | | | £770.50 | |

Sewerage

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|--|---------|----------|-------------|------------------|---------------------|
| Processing fee - developer connection | | 1 | £188.00 | £188.00 | 5.4.1 |
| Sewerage infrastructure charge | | 1 | £279.00 | £279.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage connection charges | | | | £467.00 | |
| Total water and sewerage scheme charges | | | | £1,237.50 | |

17.3 Block of 10 flats – short connection example

| Description & assumptions | | |
|---------------------------|----------|--|
| New block of flats | Water | 10 new units connecting to existing main No new mains required 63mm connection – Barrier pipe required Short connection – 4 metres surfaced 2 way lights required (included in standard rates)* Individually metered flats* |
| | Sewerage | Connection undertaken by the developer* No new sewers required |

Water

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|--|---|----------|-------------|-------------------|---------------------|
| Water connection application fee (single) | | 1 | £80.00 | £80.00 | 4.6.1 |
| Water connection administration fee (single) | | 1 | £37.00 | £37.00 | 4.6.2 |
| Water connection administration fee (additional) | | 9 | £12.00 | £108.00 | |
| Application & administration charges | | | | £225.00 | |
| 63mm off-site surfaced metered connection | 63mm service connection (Includes 2m of pipework) | 1 | £3,599.00 | £3,599.00 | 4.6.3 |
| | 63mm BP surfaced pipe additional metres | 2 | £171.00 | £342.00 | |
| | Provision of 15mm meter | 10 | £50.00 | £500.00 | 4.6.6 |
| | installation of 15mm meter | 10 | £42.00 | £420.00 | |
| Connection charges | | | | £4,861.00 | |
| Building water | | 10 | £27.50 | £275.00 | 8.2 |
| Water infrastructure charge | | 10 | £302.00 | £3,020.00 | 6.1 |
| Water infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 10 | -£751.00 | -£7,510.00 | 7.1 |
| Other charges | | | | -£4,215.00 | |
| Total water connection scheme charges | | | | £871.00 | |

Sewerage

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|--|---------|----------|-------------|------------------|---------------------|
| Processing fee - developer connection | | 1 | £188.00 | £188.00 | 5.4.1 |
| Sewerage infrastructure charge | | 10 | £279.00 | £2,790.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage scheme charges | | | | £2,978.00 | |
| Total water and sewerage scheme charges | | | | £3,849.00 | |

New connections and developer services charges scheme 2020/2021

17.4 Block of 10 flats – long connection example

| Description & assumptions | | |
|---------------------------|----------|---|
| New block of flats | Water | 10 new units connecting to existing main No new mains required 63mm connection – Barrier pipe required Short connection – 4 metres surfaced, 4 metres unsurfaced 2 way lights required (included in standard rates)* Individually metered flats* |
| | Sewerage | Connection undertaken by the developer* No new sewers required |

Water

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|--|---|----------|-------------|-------------------|---------------------|
| Water connection application fee (single) | | 1 | £80.00 | £80.00 | 4.6.1 |
| Water connection administration fee (single) | | 1 | £37.00 | £37.00 | 4.6.2 |
| Water connection administration fee (additional) | | 9 | £12.00 | £108.00 | |
| Application & administration charges | | | | £225.00 | |
| 63mm off-site surfaced metered connection | 63mm service connection (Includes 2m of pipework) | 1 | £3,599.00 | £3,599.00 | 4.6.3 |
| | 63mm BP surfaced pipe additional metres | 2 | £171.00 | £342.00 | |
| | 63mm BP unsurfaced additional metres | 4 | £109.00 | £436.00 | |
| | Provision of 15mm meter | 10 | £50.00 | £500.00 | 4.6.6 |
| | installation of 15mm meter | 10 | £42.00 | £420.00 | |
| Connection charges | | | | £5,297.00 | |
| Building water | | 10 | £27.50 | £275.00 | 8.2 |
| Water infrastructure charge | | 10 | £302.00 | £3,020.00 | 6.1 |
| Water infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 10 | -£751.00 | -£7,510.00 | 7.1 |
| Other charges | | | | -£4,215.00 | |
| Total water connection scheme charges | | | | £1,307.00 | |

Sewerage

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|--|---------|----------|-------------|------------------|---------------------|
| Processing fee - developer connection | | 1 | £188.00 | £188.00 | 5.4.1 |
| Sewerage infrastructure charge | | 10 | £279.00 | £2,790.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage scheme charges | | | | £2,978.00 | |
| Total water and sewerage scheme charges | | | | £4,285.00 | |

17.5 Small housing development – Statutory mains requisition example

| Description & assumptions | | |
|---------------------------|----------|---|
| Small housing development | Water | 10 new connections to new main New mains required – total 50M <ul style="list-style-type: none"> • 10 metres - 90mm PE surfaced • 20 metres - 90mm PE unsurfaced • 20 metres – 63mm PE unsurfaced 2 way lights required* (included in standard rates) Up to 2 metres of pipework for each service connection* |
| | Sewerage | We would not typically undertake sewer construction work. In this example we have included indicative sewer requisition charges for an example of construction of sewers through third party land to provide a sewer for the new development to connect to, for illustrative purposes. 200 metres off-site sewers* <ul style="list-style-type: none"> • 100 metres – 150mm sewer (foul) • 100 metres – 300mm sewer (surface water) • 1 manhole for every 100 metres of sewer |

Water

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|---|--|----------|-------------|-------------------|---------------------|
| Requisition application fee | | 1 | £358.00 | £358.00 | 4.4.1 |
| Requisition administration fee | | 1 | £257.00 | £257.00 | 4.4.2 |
| Service connection administration charge associated with mains requisition scheme | | 10 | £17.00 | £170.00 | 4.4.3 |
| Application & administration charges | | | | £785.00 | |
| Branch connection | Surfaced 90mm connection (Includes 2m of pipework) | 1 | £4,429.00 | £4,429.00 | 4.5.1 |
| | Additional 90mm PE surfaced main | 8 | £198.00 | £1,584.00 | 4.5.2 |
| Piece up | unsurfaced 90mm piece-up connection | 1 | £782.00 | £782.00 | 4.5.1 |
| Mains laying | 20m of 63mm and 20m of 90mm PE unsurfaced main | 40 | £129.00 | £5,160.00 | 4.5.2 |
| Mains requisition charges | | | | £11,955.00 | |
| 25mm on-site metered connection | 25mm unsurfaced service connection (Includes up to 2m of pipework, provision & installation of meters) | 10 | £454.00 | £4,540.00 | 4.6.3 |
| Connection charges | | | | £4,540.00 | |
| Building water | | 10 | £27.50 | £275.00 | 8.2 |
| Water infrastructure charge | | 10 | £302.00 | £3,020.00 | 6.1 |
| Water infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 10 | -£751.00 | -£7,510.00 | 7.1 |
| Other charges | | | | -£4,215.00 | |
| Total water requisition scheme charges | | | | £13,065.00 | |

Sewerage

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|---|--|----------|-------------|--------------------|---------------------|
| Gravity sewers construction | up to 225mm diameter - grassland - up to 2.5m depth (foul) | 90 | £485.00 | £43,650.00 | 10.1.2 |
| | 226-300mm diameter - grassland - up to 2.5m depth (surface water) | 90 | £574.00 | £51,660.00 | |
| | up to 225mm diameter - urban - up to 2.5m depth (foul) | 10 | £1,048.00 | £10,480.00 | |
| | 226-300mm diameter - urban - up to 2.5m depth (surface water) | 10 | £1,143.00 | £11,430.00 | |
| Gravity sewer connections | up to 225mm diameter - urban - connection (foul) | 1 | £2,786.00 | £2,786.00 | 10.1.1 |
| | 226-300mm diameter - urban - connection (surface water) | 1 | £3,251.00 | £3,251.00 | |
| Manholes | 1200mm (for up to 225mm pipe) - urban - up to 2.5m depth (foul) | 1 | £9,441.00 | £9,441.00 | 10.2 |
| | 1200mm (for up to 225mm pipe) - grassland - up to 2.5m depth (foul) | 1 | £6,913.00 | £6,913.00 | |
| | 1350mm (for 226-400mm pipe) - urban - up to 2.5m depth (surface water) | 1 | £10,635.00 | £10,635.00 | |
| | 1350mm (for 226-400mm pipe) - grassland - up to 2.5m depth (surface water) | 1 | £7,702.00 | £7,702.00 | |
| Indicative sewer requisition construction charges | | | | £157,948.00 | |
| Requisition application fee | | 1 | £301.00 | £301.00 | 5.1.1 |
| Legal fee for sewer requisition agreement | | 1 | £567.00 | £567.00 | 5.1.2 |
| Legal fee for provision of an easement (per transaction) | | 1 | £627.00 | £627.00 | |
| Sewerage infrastructure charge | | 10 | £279.00 | £2,790.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Other charges | | | | £4,285.00 | |
| Total indicative sewer requisition scheme charges | | | | £162,233.00 | |
| Total water and indicative sewerage scheme charges | | | | £175,298.00 | |

17.6 Medium housing development – Statutory mains requisition example

| Description & assumptions | | |
|----------------------------|----------|--|
| Medium housing development | Water | 50 new connections to new main New mains required – total 300 metres <ul style="list-style-type: none"> • 10 metres - 180mm PE surfaced • 90 metres - 180mm PE unsurfaced • 100 metres – 125mm PE unsurfaced • 100 metres – 90mm PE unsurfaced 2 way lights required (included in standard rates)* |
| | Sewerage | Connection undertaken by the developer* Sewer construction undertaken by developer* For calculation of estimated value of works 800 metres of on-site sewers laid by developer* <ul style="list-style-type: none"> • 200 metres – 150mm sewer (foul) • 200 metres – 225mm sewer (foul) • 400 metres – 300mm sewer (surface water) • 1 manhole for every 100M of sewer |

Water

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|---|--|----------|-------------|-------------------|--------------------------|
| Requisition application fee | | 1 | £358.00 | £358.00 | 4.4.1 |
| Requisition administration fee | | 1 | £257.00 | £257.00 | 4.4.2 |
| Service connection administration charge associated with mains requisition scheme | | 50 | £17.00 | £850.00 | 4.4.3 |
| Application & administration charges | | | | £1,465.00 | |
| Branch connection | Surfaced 180mm branch connection (Includes 2m of pipework) | 1 | £7,383.00 | £7,383.00 | 4.5.1 |
| | Additional 180mm PE surfaced main | 8 | £300.00 | £2,400.00 | 4.5.2 |
| Piece up | unsurfaced 180mm piece-up connection | 1 | £1,604.00 | £1,604.00 | 4.5.1 |
| Mains laying | 180mm PE unsurfaced | 90 | £226.00 | £20,340.00 | 4.5.2 |
| | 125mm PE unsurfaced | 100 | £157.00 | £15,700.00 | |
| | 90mm PE unsurfaced main | 100 | £129.00 | £12,900.00 | |
| Mains Requisition charges | | | | £60,327.00 | |
| 25mm on-site metered connection | 25mm unsurfaced service connection (Includes up to 2m of pipework, provision & installation of meters) | 50 | £454.00 | £22,700.00 | 4.6.3 |
| Connection charges | | | | £22,700.00 | |

| | | | | |
|---|----|----------|--------------------|-------|
| Building water | 50 | £27.50 | £1,375.00 | 8.2 |
| Water infrastructure charge | 50 | £302.00 | £15,100.00 | 6.1 |
| Water infrastructure credit | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | 50 | -£751.00 | -£37,550.00 | 7.1 |
| Other charges | | | -£21,075.00 | |
| Total water requisition scheme charges | | | £63,417.00 | |

Sewerage

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|--|---------|----------|-------------|-------------------|--------------------------|
| Processing fee - developer connection | | 1 | £188.00 | £188.00 | 5.4.1 |
| Sewerage infrastructure charge | | 50 | £279.00 | £13,950.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage scheme charges | | | | £14,138.00 | |
| Total water and sewerage scheme charges (excludes security) | | | | £77,555.00 | |

| | | | | |
|--|---------------------------------|--|-------------|-------|
| Estimated value of works (for calculation of security) | | | £192,199.00 | 5.2 |
| Security** | 10% of estimated value of works | | £19,219.90 | 5.6.4 |
| **Released on adoption | | | | |

17.7 Large housing development – Statutory mains requisition example

| Description & assumptions | | |
|---------------------------|----------|--|
| Large housing development | Water | 200 new connections to new main New mains required – total 1000 metres <ul style="list-style-type: none"> • 10 metres - 180mm PE surfaced • 290 metres - 180mm PE unsurfaced • 300 metres – 125mm PE unsurfaced • 400 metres – 90mm PE unsurfaced 2 way lights required (included in standard rates)* |
| | Sewerage | Connections undertaken by the developer* Construction undertaken by developer* For calculation of estimated value of works: 2000 metres of on-site sewers laid by developer* <ul style="list-style-type: none"> • 400 metres – 150mm sewer (foul) • 400 metres – 225mm sewer (foul) • 200 metres – 300mm sewer (surface water) • 1000 metres – 300mm sewer (surface water) • 1 manhole for every 100 metres of sewer |

Water

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|---|--|----------|-------------|--------------------|---------------------|
| Requisition application fee | | 1 | £358.00 | £358.00 | 4.4.1 |
| Requisition administration fee | | 1 | £257.00 | £257.00 | 4.4.2 |
| Service connection administration charge associated with mains requisition scheme | | 200 | £17.00 | £3,400.00 | 4.4.3 |
| Application & administration charges | | | | £4,015.00 | |
| Branch connection | Surfaced 180mm branch connection (Includes 2m of pipework) | 1 | £7,383.00 | £7,383.00 | 4.5.1 |
| | Additional 180mm PE surfaced main | 8 | £300.00 | £2,400.00 | 4.5.2 |
| Piece up | unsurfaced 180mm piece-up connection | 1 | £1,604.00 | £1,604.00 | 4.5.1 |
| Mains laying | 180mm PE unsurfaced | 290 | £226.00 | £65,540.00 | 4.5.2 |
| | 125mm PE unsurfaced | 300 | £157.00 | £47,100.00 | |
| | 90mm PE unsurfaced main | 400 | £129.00 | £51,600.00 | |
| Mains requisition charges | | | | £175,627.00 | |

| | | | | | |
|--|--|-----|----------|--------------------|-------|
| 25mm on-site metered connection | 25mm unsurfaced service connection (Includes up to 2m of pipework, provision & installation of meters) | 200 | £454.00 | £90,800.00 | 4.6.3 |
| Connection charges | | | | £90,800.00 | |
| Building water | | 200 | £27.50 | £5,500.00 | 8.2 |
| Water infrastructure charge | | 200 | £302.00 | £60,400.00 | 6.1 |
| Water infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 200 | -£751.00 | -£150,200.00 | 7.1 |
| Other charges | | | | -£84,300.00 | |
| Total water connection scheme charges | | | | £186,142.00 | |

Sewerage

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|--|---------|----------|-------------|--------------------|--------------------------|
| Processing fee – developer connection | | 1 | £188.00 | £188.00 | 5.4.1 |
| Sewerage infrastructure charge | | 200 | £279.00 | £55,800.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage charges | | | | £55,988.00 | |
| Total water and sewerage scheme charges (excludes security) | | | | £242,130.00 | |

| | | | | |
|--|---------------------------------|--|-------------|-------|
| Estimated value of works (for calculation of security) | | | £469,532.00 | 5.2 |
| Security** | 10% of estimated value of works | | £46,953.20 | 5.6.4 |
| **Released on adoption | | | | |

17.8 Small housing development – self laid mains example

| Description & assumptions | | |
|---------------------------|----------|---|
| Small housing development | Water | 10 new connections to new main New mains required – total 50 metres <ul style="list-style-type: none"> • 10 metres – 90mm PE surfaced • 20 metres – 90mm PE unsurfaced- carried out by SLP • 20 metres – 63mm PE unsurfaced- carried out by SLP 2 way lights required (included in standard rates)* Branch connection & piece up carried out by UU* Meters provided and installed by SLP* |
| | Sewerage | Connection undertaken by the developer* Sewer construction undertaken by developer* For calculation of estimated value of works 200 metres of on-site sewers laid by developer* <ul style="list-style-type: none"> • 100 metres – 150mm sewer (foul) • 100 metres – 300mm sewer (surface water) • 1 manhole for every 100 metres of sewer |

Water

| Charge Description | Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|---|---|----------|-------------|-------------------|--------------------------|
| Self-lay application fee | | 1 | £227.00 | £227.00 | 4.3.1 |
| Self-lay administration fee | | 1 | £348.00 | £348.00 | 4.3.2 |
| Self-lay service connection administration charge | | 10 | £17.00 | £170.00 | 4.3.6 |
| Application & administration charges | | | | £745.00 | |
| Branch connection (carried out by UU) | Surfaced 90mm branch connection (Includes 2m of pipework) | 1 | £4,429.00 | £4,429.00 | 4.5.1 |
| | Additional 90mm PE surfaced main (per m) | 8 | £198.00 | £1,584.00 | 4.5.2 |
| Piece up (carried out by UU) | unsurfaced 90mm piece-up connection | 1 | £782.00 | £782.00 | 4.5.1 |
| Construction charges | | | | £6,795.00 | |
| Building water | | 10 | £27.50 | £275.00 | 8.2 |
| Water infrastructure charge | | 10 | £302.00 | £3,020.00 | 6.1 |
| Water Infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 10 | -£751.00 | -£7,510.00 | 7.1 |
| Other charges | | | | -£4,215.00 | |
| Total water scheme charges | | | | £3,325.00 | |

Sewerage

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|--|----------------------------------|----------|-------------|------------------|--------------------------|
| Sewer adoption application fee | | 1 | £1,163.00 | £1,163.00 | 5.6.1 |
| Processing fee section 104 | 2.5% of estimated value of works | 2.5% | £54,628.00 | £1,365.70 | 5.6.3 |
| Legal fee for a sewer adoption agreement | | 1 | £579.00 | £579.00 | 5.6.2 |
| Legal fee for transfer of land or provision of an easement | | 1 | £627.00 | £627.00 | |
| Sewerage infrastructure charge | | 10 | £279.00 | £2,790.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage scheme charges | | | | £6,524.70 | |
| Total water and sewerage scheme charges (excludes security) | | | | £9,849.70 | |

| | | | | |
|---|---------------------------------|--|------------|-------|
| Estimated value of works (for calculation of processing fee & security) | | | £54,628.00 | 5.2 |
| Security** | 10% of estimated value of works | | £5,462.80 | 5.6.4 |
| **Released on adoption | | | | |

17.9 Medium housing development – self laid mains example

| Description & assumptions | | |
|----------------------------|----------|---|
| Medium housing development | Water | 50 new connections to new main New mains required – total 300 metres <ul style="list-style-type: none"> • 10 metres – 180mm PE surfaced • 90 metres – 180mm PE unsurfaced- carried out by SLP • 100 metres – 125mm PE unsurfaced- carried out by SLP • 100 metres – 90mm PE unsurfaced- carried out by SLP 2 way lights required (included in standard rates)* Branch connection and piece up carried out by UU* Meters provided & installed by SLP* |
| | Sewerage | Connections undertaken by the developer* Sewer construction undertaken by developer* For calculation of estimated value of works 800 metres of on-site sewers laid by developer* <ul style="list-style-type: none"> • 200 metres – 150mm sewer (foul) • 200 metres – 225mm sewer (foul) • 400 metres – 300mm sewer (surface water) • 1 manhole for every 100 metres of sewer |

Water

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|---|--|----------|-------------|--------------------|---------------------|
| Self-lay application fee | | 1 | £227.00 | £227.00 | 4.3.1 |
| Self-lay administration fee | | 1 | £348.00 | £348.00 | 4.3.2 |
| Self-lay service connection administration charge | | 50 | £17.00 | £850.00 | 4.3.6 |
| Application & administration charges | | | | £1,425.00 | |
| Branch connection (carried out by UU) | Surfaced 180mm branch connection (Includes 2m of pipework) | 1 | £7,383.00 | £7,383.00 | 4.5.1 |
| | Additional 180mm PE surfaced main (per m) | 8 | £300.00 | £2,400.00 | 4.5.2 |
| Piece up (carried out by UU) | unsurfaced 180mm piece-up connection (Includes up to 2m of pipework) | 1 | £1,604.00 | £1,604.00 | 4.5.1 |
| Construction charges | | | | £11,387.00 | |
| Building water | | 50 | £27.50 | £1,375.00 | 8.2 |
| Water infrastructure charge | | 50 | £302.00 | £15,100.00 | 6.1 |
| Water infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 50 | -£751.00 | -£37,550.00 | 7.1 |
| Other charges | | | | -£21,075.00 | |
| Total water scheme charges | | | | -£8,263.00 | |

New connections and developer services charges scheme 2020/2021

Sewerage

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|---|----------------------------------|----------|-------------|-------------------|--------------------------|
| Sewer adoption application fee | | 1 | £1,163.00 | £1,163.00 | 5.6.1 |
| Processing fee section 104 | 2.5% of estimated value of works | 2.5% | £192,199.00 | £4,804.98 | 5.6.3 |
| Legal fee for a sewer adoption agreement | | 1 | £579.00 | £579.00 | 5.6.2 |
| Legal fee for transfer of land or provision of an easement | | 1 | £627.00 | £627.00 | |
| Sewerage infrastructure charge | | 50 | £279.00 | £13,950.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage scheme charges | | | | £21,123.98 | |
| Total water and sewerage scheme charges (excludes security) | | | | £12,860.98 | |
| Estimated value of works (for calculation of processing fee & security) | | | | £192,199.00 | 5.2 |
| Security** | 10% of estimated value of works | | £19,219.90 | 5.6.3 | |
| **Released on adoption | | | | | |

17.10 Large housing development – self laid mains example

| Description & assumptions | | |
|---------------------------|----------|--|
| Large housing development | Water | 200 new connections to new main New mains required – total 1000 metres <ul style="list-style-type: none"> • 10 metres – 180mm PE surfaced • 290 metres – 180mm PE unsurfaced- carried out by SLP • 300 metres – 125mm PE unsurfaced- carried out by SLP • 400 metres – 90mm PE unsurfaced- carried out by SLP 2 way lights required (included in standard rates)* Branch connection and piece up carried out by UU* Meters provided & installed by SLP* |
| | Sewerage | For calculation of estimated value of works: 2000 metres of on-site sewers laid by developer* <ul style="list-style-type: none"> • 400 metres – 150mm sewer (foul) • 400 metres – 225mm sewer (foul) • 200 metres – 300mm sewer (surface water) • 1000 metres – 300mm sewer (surface water) • 1 manhole for every 100 metres of sewer |

Water

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Ref. |
|---|--|----------|-------------|--------------------|---------------------|
| Self-lay application fee | | 1 | £227.00 | £227.00 | 4.3.1 |
| Self-lay administration fee | | 1 | £348.00 | £348.00 | 4.3.2 |
| Self-lay service connection administration charge | | 200 | £17.00 | £3,400.00 | 4.3.6 |
| Application & administration charges | | | | £3,975.00 | |
| Branch connection (carried out by UU) | Surfaced 180mm branch connection (Includes 2m of pipework) | 1 | £7,383.00 | £7,383.00 | 4.5.1 |
| | Additional 180mm PE surfaced main (per m) | 8 | £300.00 | £2,400.00 | 4.5.2 |
| Piece up (carried out by UU) | unsurfaced 180mm piece-up connection | 1 | £1,604.00 | £1,604.00 | 4.5.1 |
| Construction charges | | | | £11,387.00 | |
| Building water | | 200 | £27.50 | £5,500.00 | 8.2 |
| Water infrastructure charge | | 200 | £302.00 | £60,400.00 | 6.1 |
| Water infrastructure credit | | 0 | -£302.00 | £0.00 | 6.4.1 |
| Income Offset | | 200 | -£751.00 | -£150,200.00 | 7.1 |
| Other charges | | | | -£84,300.00 | |
| Total water scheme charges | | | | -£68,938.00 | |

New connections and developer services charges scheme 2020/2021

Sewerage

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|--|----------------------------------|----------|-------------|-------------------|--------------------------|
| Sewer adoption application fee | | 1 | £1,163.00 | £1,163.00 | 5.6.1 |
| Processing fee section 104 | 2.5% of estimated value of works | 2.5% | £469,532.00 | £11,738.30 | 5.6.3 |
| Legal fee for a sewer adoption agreement | | 1 | £579.00 | £579.00 | 5.6.2 |
| Legal fee for transfer of land or provision of an easement | | 1 | £627.00 | £627.00 | |
| Sewerage infrastructure charge | | 200 | £279.00 | £55,800.00 | 6.1 |
| Sewerage infrastructure credit | | 0 | -£279.00 | £0.00 | 6.4.1 |
| Total sewerage scheme charges | | | | £69,907.30 | |

| | |
|--|----------------|
| Total water and sewerage scheme charges (excludes security) | £969.30 |
|--|----------------|

| | | | |
|---|---------------------------------|------------|-------|
| Estimated value of works (for calculation of processing fee & security) | £469,532.00 | 5.2 | |
| Security** | 10% of estimated value of works | £46,953.20 | 5.6.4 |
| **Released on adoption | | | |

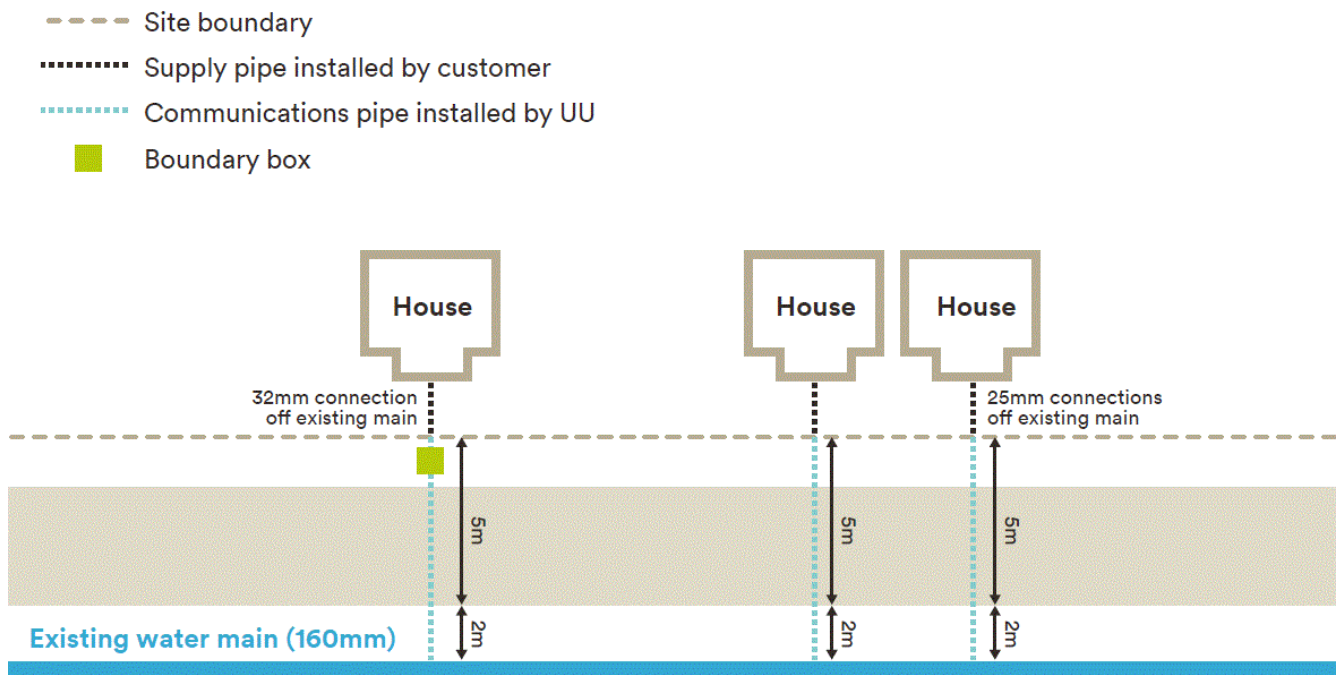
18 APPENDIX 2 – FURTHER EXAMPLE DEVELOPMENTS

In previous years we have published a number of example scheme charges for illustrative purposes. We have updated these example schemes for 2020/21 charges for consistency.

We will consult with our customers during the charging year to establish which examples are most useful in order to inform our approach for future years.

Applicable miscellaneous charges as detailed in section 9 may apply to all developments.

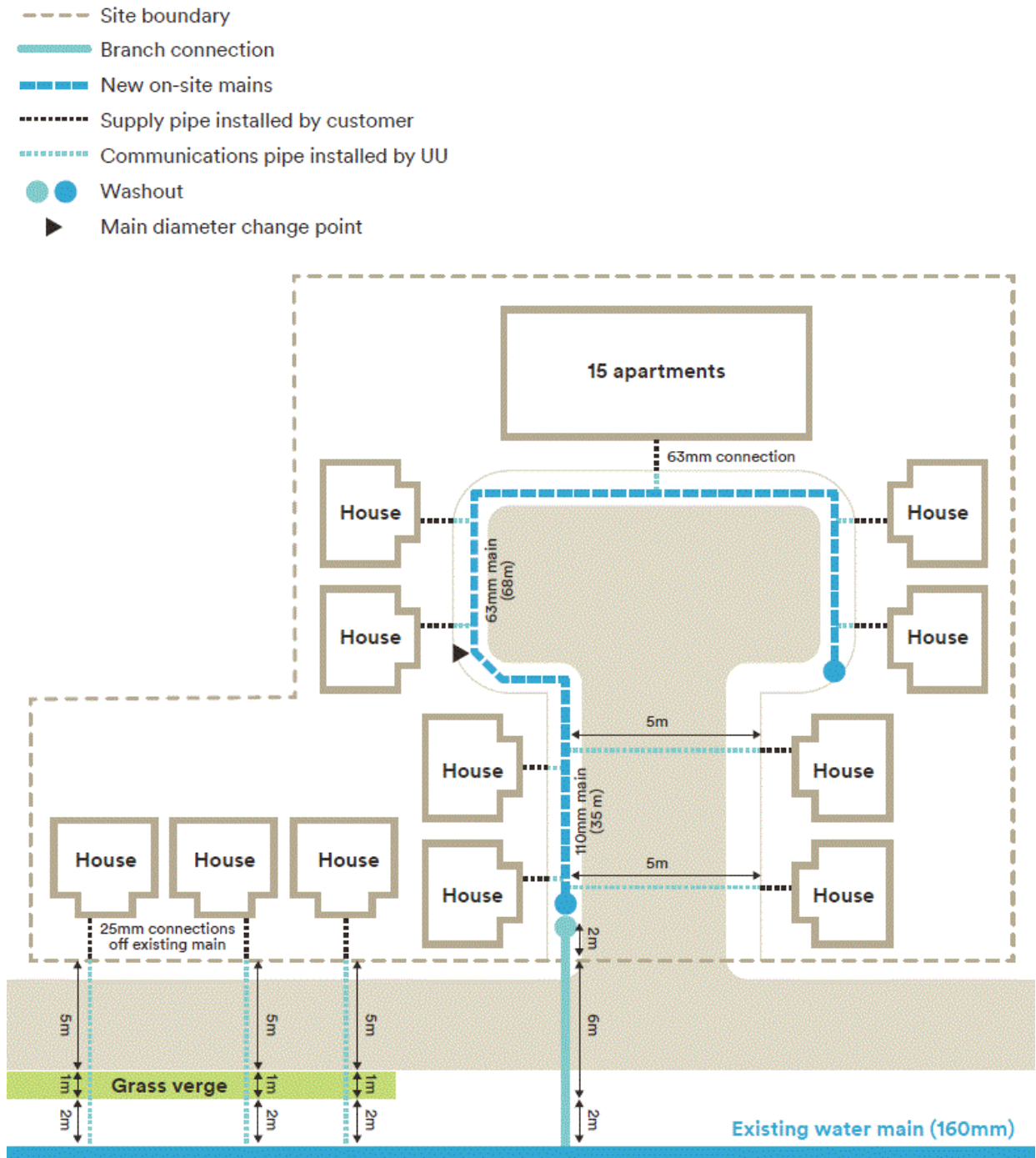
18.1 Service connection off existing main



For the purposes of this example: No infrastructure credits are applicable.

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|---|--|----------|-------------|------------------|--------------------------|
| Water connection application fee (single connection) | | 1 | £80.00 | £80.00 | 4.6.1 |
| Water connection application fee (additional connection) | | 2 | £34.00 | £68.00 | |
| Water connection administration fee (single connection) | | 1 | £37.00 | £37.00 | 4.6.2 |
| Water connection administration fee (additional connection) | | 2 | £12.00 | £24.00 | |
| 25mm metered connection | 25mm surfaced service connection | 2 | £637.00 | £1,274.00 | 4.6.3 |
| | Additional 25mm PE surfaced service pipe | 10 | £97.00 | £970.00 | |
| 32mm metered connection | 32mm surfaced service connection | 1 | £541.00 | £541.00 | |
| | Additional 32m PE surfaced service pipe | 5 | £97.00 | £485.00 | |
| | Provision and installation of boundary box | 1 | £149.00 | £149.00 | |
| | Installation of 15mm – 25mm manifold meter | 1 | £42.00 | £42.00 | 4.6.6 |
| Provision of 15mm – 20mm meter | 1 | £50.00 | £50.00 | | |
| Service connection charges | | | | £3,720.00 | |
| Building water | Building water | 3 | £27.50 | £82.50 | 8.2 |
| Infrastructure | Water infrastructure charge | 3 | £302.00 | £906.00 | 6.1 |
| | Water infrastructure credits | 0 | -£302.00 | £0.00 | 6.4.1 |
| | Sewerage infrastructure charge | 3 | £279.00 | £837.00 | 6.1 |
| | Sewerage infrastructure credits | 0 | -£279.00 | £0.00 | 6.4.1 |
| Income offset | Number of plots | 3 | £751.00 | -£2,253.00 | 7.1 |
| Other charges | | | | -£427.50 | |
| Total charges | | | | £3,292.50 | |

18.2 Statutory Mains Requisition example

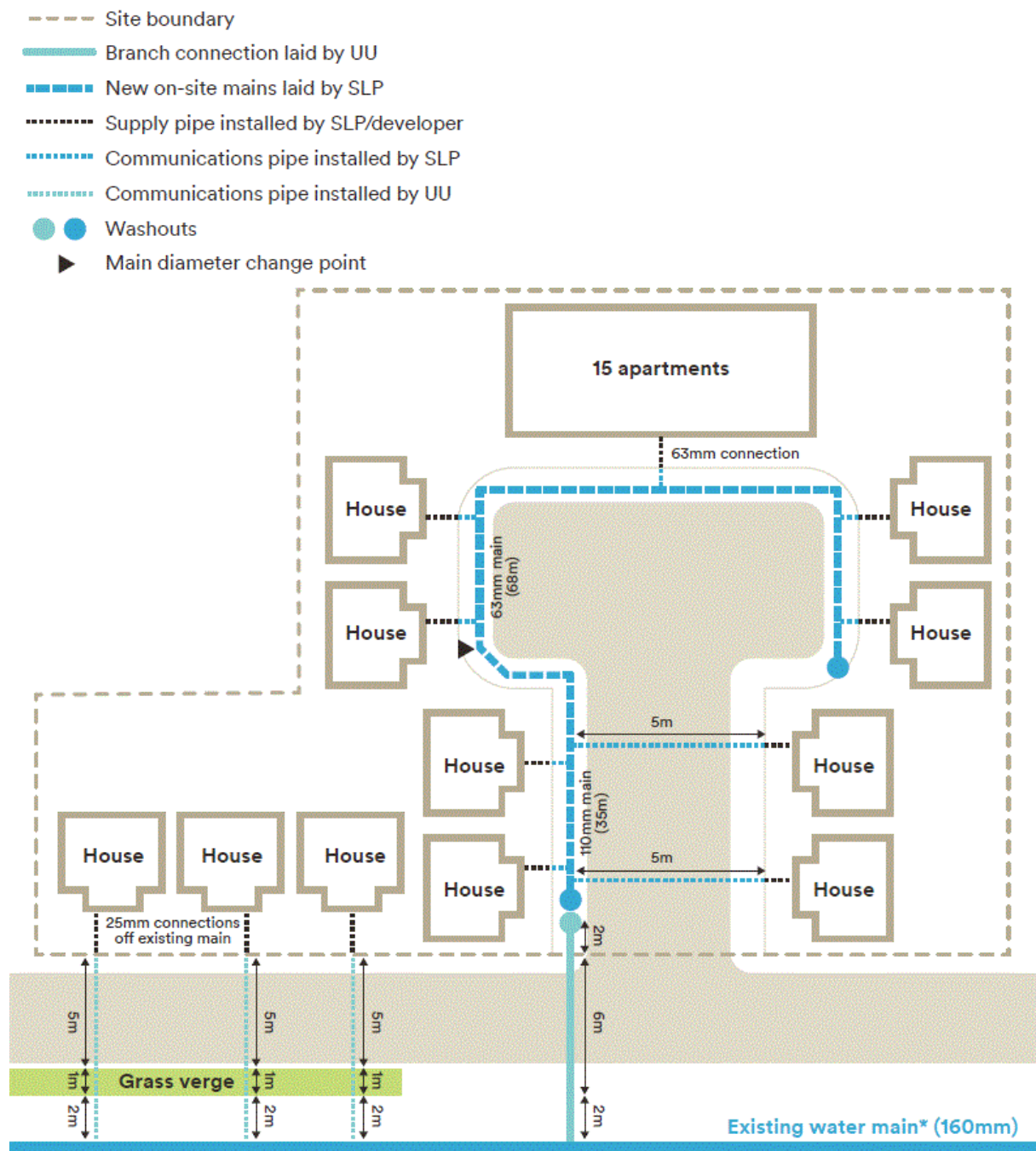


For the purposes of this example: Previous use on this site equates to 3 infrastructure credits (see 6.4.1).

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|---|---|----------|-------------|-------------------|--------------------------|
| Requisition application fee | | 1 | £358.00 | £358.00 | 4.4.1 |
| Administration charge | | | | £358.00 | |
| Requisition administration fee | | 1 | £257.00 | £257.00 | 4.4.2 |
| Branch Connection | Surfaced 110mm branch connection | 1 | £5,595.00 | £5,595.00 | 4.5.1 |
| | Additional 110mm PE surfaced main | 6 | £241.00 | £1,446.00 | 4.5.2 |
| | Additional 110mm PE unsurfaced main | 2 | £157.00 | £314.00 | |
| Piece up | Unsurfaced 110mm piece-up connection | 1 | £858.00 | £858.00 | 4.5.1 |
| Mains laying | 110mm PE unsurfaced main | 35 | £157.00 | £5,495.00 | 4.5.2 |
| | 63mm PE unsurfaced main | 68 | £129.00 | £8,772.00 | |
| Mains requisition charge (payable before commencement of work) | | | | £22,737.00 | |
| 25mm on-site metered connection | 25mm unsurfaced service connection | 8 | £454.00 | £3,632.00 | 4.6.3 |
| | Additional 25mm PE lay only/laid in duct service pipe | 6 | £20.00 | £120.00 | |
| 25mm off-site metered connection | 25mm surfaced service connection | 3 | £637.00 | £1,911.00 | |
| | Additional 25mm PE surfaced service pipe | 15 | £97.00 | £1,455.00 | |
| | Additional 25mm PE unsurfaced service pipe (verge) | 3 | £61.00 | £183.00 | |
| 63mm service connection | 63mm unsurfaced service connection | 1 | £2,925.00 | £2,925.00 | |
| | Provision of 15mm – 20mm meter | 15 | £50.00 | £750.00 | |
| | Installation of 15mm – 25mm manifold meter | 15 | £42.00 | £630.00 | |
| Service connection administration charge | Administration charge for each new connected property | 26 | £17.00 | £442.00 | 4.4.3 |
| Service connection charge | | | | £12,048.00 | |
| Building water | Building water | 26 | £27.50 | £715.00 | 8.2 |
| Infrastructure | Water infrastructure charge | 26 | £302.00 | £7,852.00 | 6.1 |
| | Water infrastructure credits | 3 | -£302.00 | -£906.00 | 6.4.1 |
| | Sewerage infrastructure charge | 26 | £279.00 | £7,254.00 | 6.1 |
| | Sewerage infrastructure credits | 3 | -£279.00 | -£837.00 | 6.4.1 |
| Income offset | Number of plots | 23 | -£751.00 | -£17,273.00 | 7.1 |
| Other charges | | | | -£3,195.00 | |
| Total statutory scheme charges | | | | £31,948.00 | |

18.3 Self-lay mains example

If our host main is smaller than the proposed new site main, then please contact us to discuss the possible solutions.

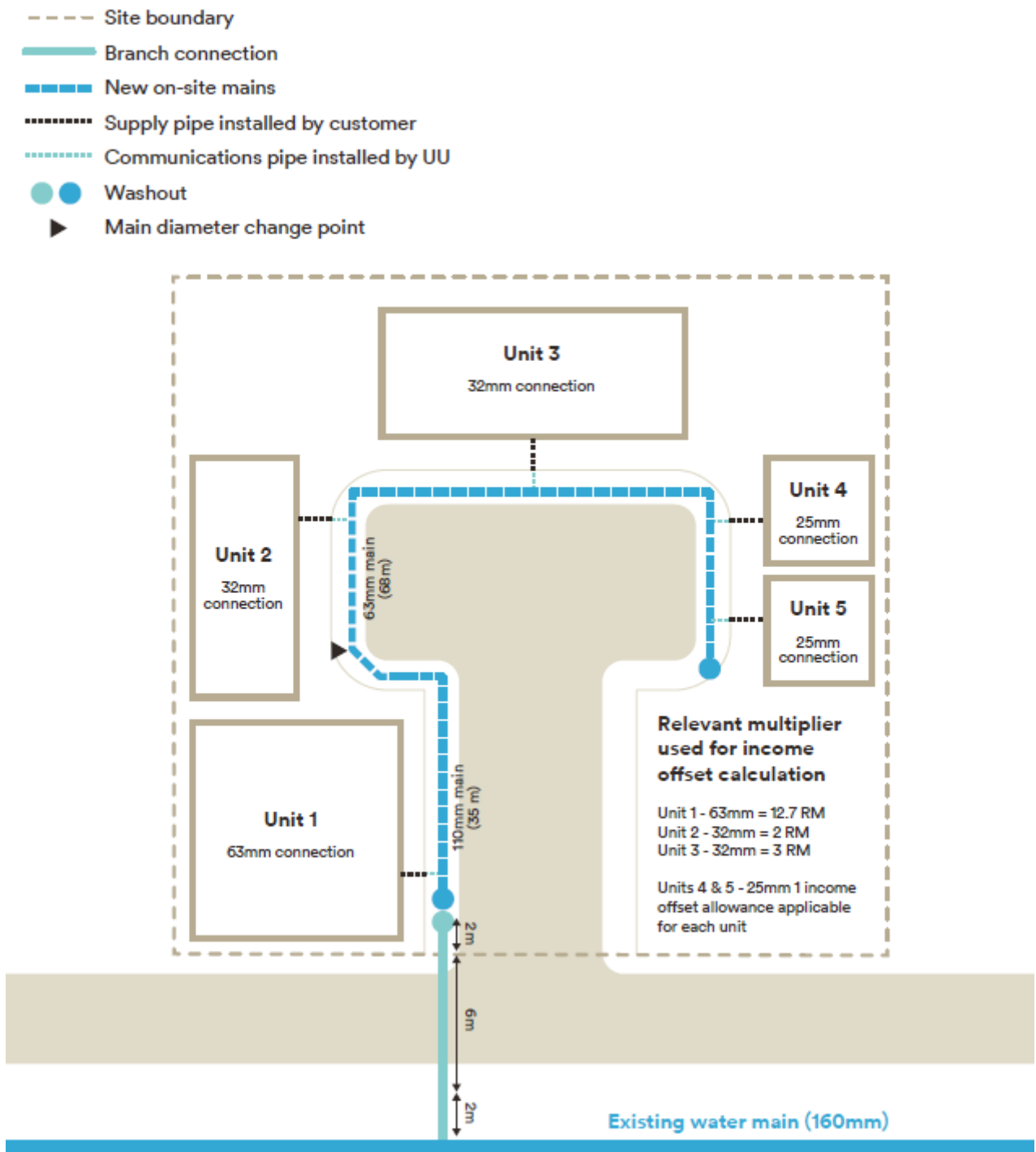


For the purposes of this example, the following assumptions are made:

- 25mm off-site metered connections from the existing water main are carried out by us.
- All on-site connections are made by the SLP or NAV.

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|--|--|----------|-------------|-------------------|--------------------------|
| Self-lay application fee | | 1 | £227.00 | £227.00 | 4.3.1 |
| Administration charge | | | | £227.00 | |
| Self-lay administration fee | | 1 | £348.00 | £348.00 | 4.3.2 |
| 25mm on-site metered connection – carried out by SLP | 25mm unsurfaced service connection | 8 | - | - | |
| | Additional 25mm PE lay only/laid in duct service pipe | 6 | - | - | |
| Branch connection | Surfaced 110mm branch connection | 1 | £5,595.00 | £5,595.00 | 4.5.1 |
| | Additional 110mm PE surfaced main | 6 | £241.00 | £1,446.00 | 4.5.2 |
| | Additional 110mm PE unsurfaced main | 2 | £157.00 | £314.00 | |
| Piece up | Unsurfaced 110mm piece-up connection | 1 | £858.00 | £858.00 | 4.5.1 |
| 25mm off-site metered connection | 25mm surfaced service connection | 3 | £637.00 | £1,911.00 | 4.6.3 |
| | Additional 25mm PE surfaced service pipe | 15 | £97.00 | £1,455.00 | |
| | Additional 25mm PE unsurfaced service pipe (grass verge) | 3 | £61.00 | £183.00 | |
| 63mm service connection – carried out by SLP | 63mm unsurfaced service connection | 1 | - | - | |
| | Provision & installation of 15mm – 20mm manifold meter | 15 | - | - | |
| Service connection administration charge | Administration charge for each new connected property | 26 | £17.00 | £442.00 | 4.3.6 |
| Connection charges | | | | £12,552.00 | |
| Building water | Building water | 26 | £27.50 | £715.00 | 8.2 |
| Infrastructure | Water infrastructure charge | 26 | £302.00 | £7,852.00 | 6.1 |
| | Water infrastructure credits | 3 | -£302.00 | -£906.00 | 6.4.1 |
| | Sewerage infrastructure charge | 26 | £279.00 | £7,254.00 | 6.1 |
| | Sewerage infrastructure credits | 3 | -£279.00 | -£837.00 | 6.4.1 |
| Income offset | Number of plots | 23 | -£751.00 | -£17,273.00 | 7.1 |
| Other charges | | | | -£3,195.00 | |
| Total self-lay scheme charges | | | | £9,584.00 | |

18.4 Non-Household mains requisition example

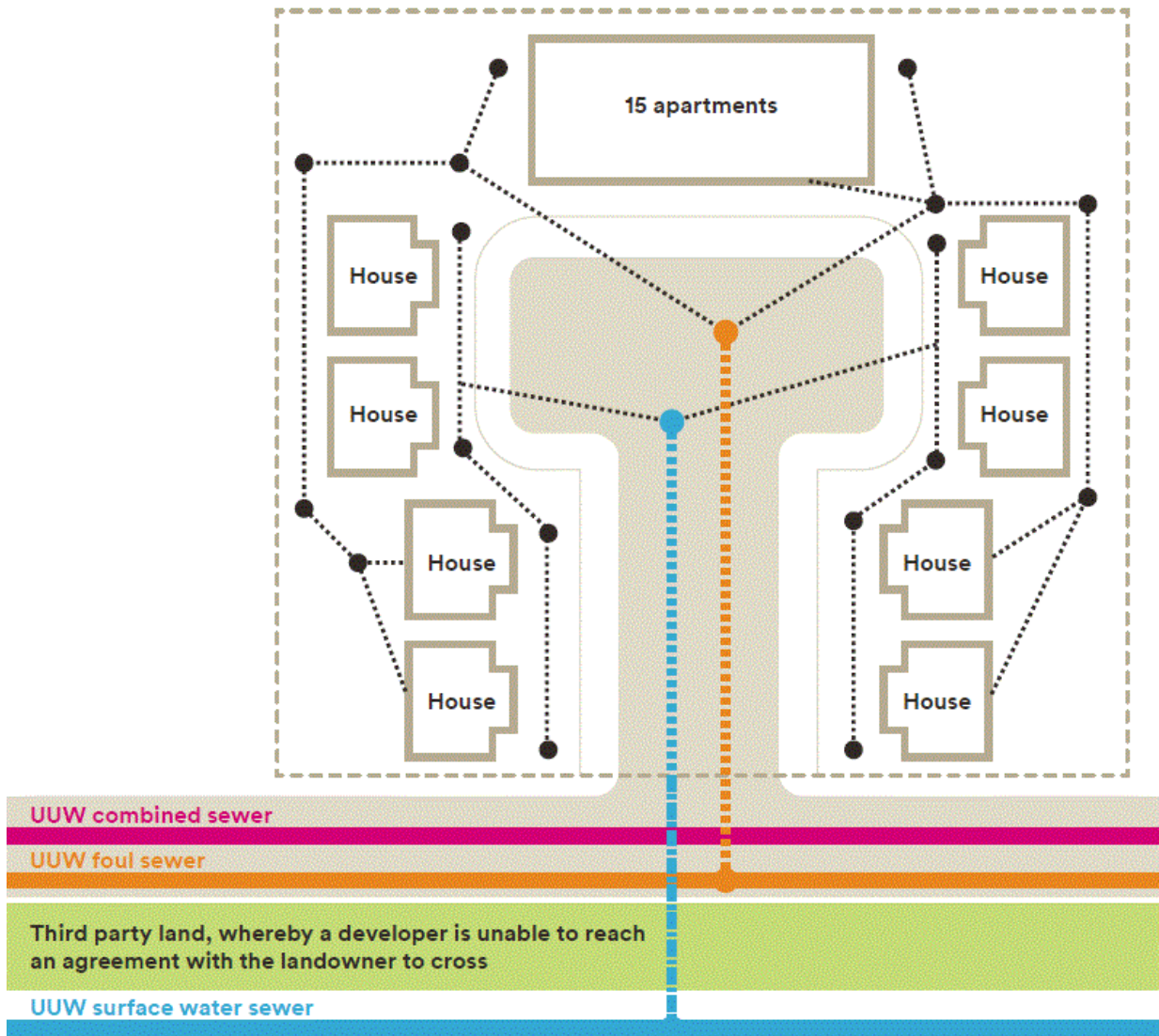


For the purposes of this example: Previous use on this site equates to 3 infrastructure credits (see 6.4.1).

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|--|---|----------|-------------|-------------------|--------------------------|
| Requisition application fee | | 1 | £358.00 | £358.00 | 4.4.1 |
| Administration charge | | | | £358.00 | |
| Requisition administration fee | | 1 | £257.00 | £257.00 | 4.4.2 |
| Branch Connection | Surfaced 110mm branch connection | 1 | £5,595.00 | £5,595.00 | 4.5.1 |
| | Additional 110mm PE surfaced main | 6 | £241.00 | £1,446.00 | 4.5.2 |
| | Additional 110mm PE unsurfaced main | 2 | £157.00 | £314.00 | |
| Piece up | Unsurfaced 110mm piece-up connection | 1 | £858.00 | £858.00 | 4.5.1 |
| Mains laying | 110mm PE unsurfaced main | 35 | £157.00 | £5,495.00 | 4.5.2 |
| | 63mm PE unsurfaced main | 68 | £129.00 | £8,772.00 | |
| Mains requisition charges (payable before commencement of work) | | | | £22,737.00 | |
| 25mm on-site metered connection | 25mm unsurfaced service connection | 2 | £454.00 | £908.00 | 4.6.3 |
| 32mm on-site metered connection | 32mm unsurfaced service connection | 2 | £438.00 | £876.00 | |
| | Installation of internal 25mm in-line meter | 2 | £128.00 | £256.00 | 4.6.6 |
| | Provide 25mm meter | 2 | £61.00 | £122.00 | |
| 63mm service connection | 63mm unsurfaced service connection | 1 | £2,925.00 | £2,925.00 | 4.6.3 |
| | Installation of internal 40mm in-line meter | 1 | £128.00 | £128.00 | 4.6.6 |
| | Provide 40mm meter | 1 | £89.00 | £89.00 | |
| Service connection administration charge associated with mains requisition scheme (per plot) | Administration charge for each new connected property | 5 | £17.00 | £85.00 | 4.4.3 |
| Service connection charges | | | | £5,389.00 | |
| Building water | Building water | 5 | £27.50 | £137.50 | 8.2 |
| Infrastructure | Water infrastructure charge | 19.7 | £302.00 | £5,949.40 | 6.1 |
| | Water infrastructure credits | 3 | -£302.00 | -£906.00 | 6.4.1 |
| | Sewerage infrastructure charge | 19.7 | £279.00 | £5,496.30 | 6.1 |
| | Sewerage infrastructure credits | 3 | -£279.00 | -£837.00 | 6.4.1 |
| Income offset | Per plot | 16.7 | -£751.00 | -£12,541.70 | 7.1 |
| Other charges | | | | -£2,701.50 | |
| Total statutory scheme charges | | | | £25,782.50 | |

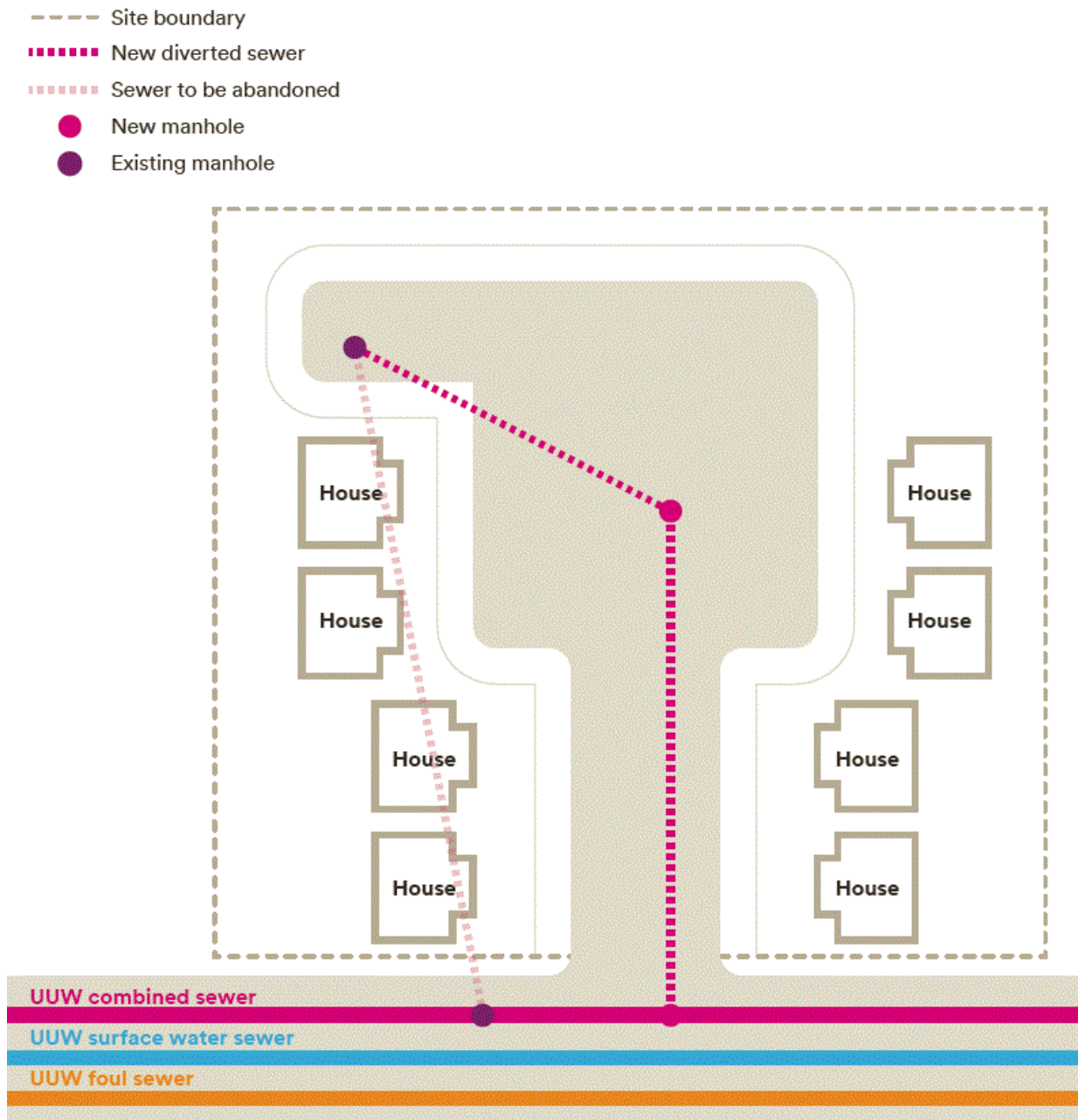
18.5 Sewer requisition example

- Site boundary
- Surface water sewer (adoption proposal)
- Proposed new foul sewer (adoption proposal)
- Private plot drainage (not adoptable)
- New manholes
- Sewer requisition surface water



| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|--|---|----------|-------------|-------------------|--------------------------|
| Gravity sewers (m) | Gravity sewers - up to 225mm diameter - urban - Up to 2.5m depth | 50 | £1,048.00 | £52,400.00 | 10.1.2 |
| Gravity sewer connections | Gravity sewer - connections - up to 225mm diameter - urban | 1 | £2,786.00 | £2,786.00 | 10.1.1 |
| Manholes | Precast concrete ring manhole - 1200mm nominal chamber diameter - Up to 225mm diameter - urban - up to 2.5m depth | 1 | £9,441.00 | £9,441.00 | 10.2 |
| Indicative sewer requisition construction charges | | | | £64,627.00 | |
| Requisition application fee | | 1 | £301.00 | £301.00 | 5.1.1 |
| Legal fee for sewer requisition agreement | | 1 | £567.00 | £567.00 | 5.1.2 |
| Legal fee for provision of an easement | | 1 | £627.00 | £627.00 | |
| Total other charges | | | | £1,495.00 | |
| Total charges | | | | £66,122.00 | |

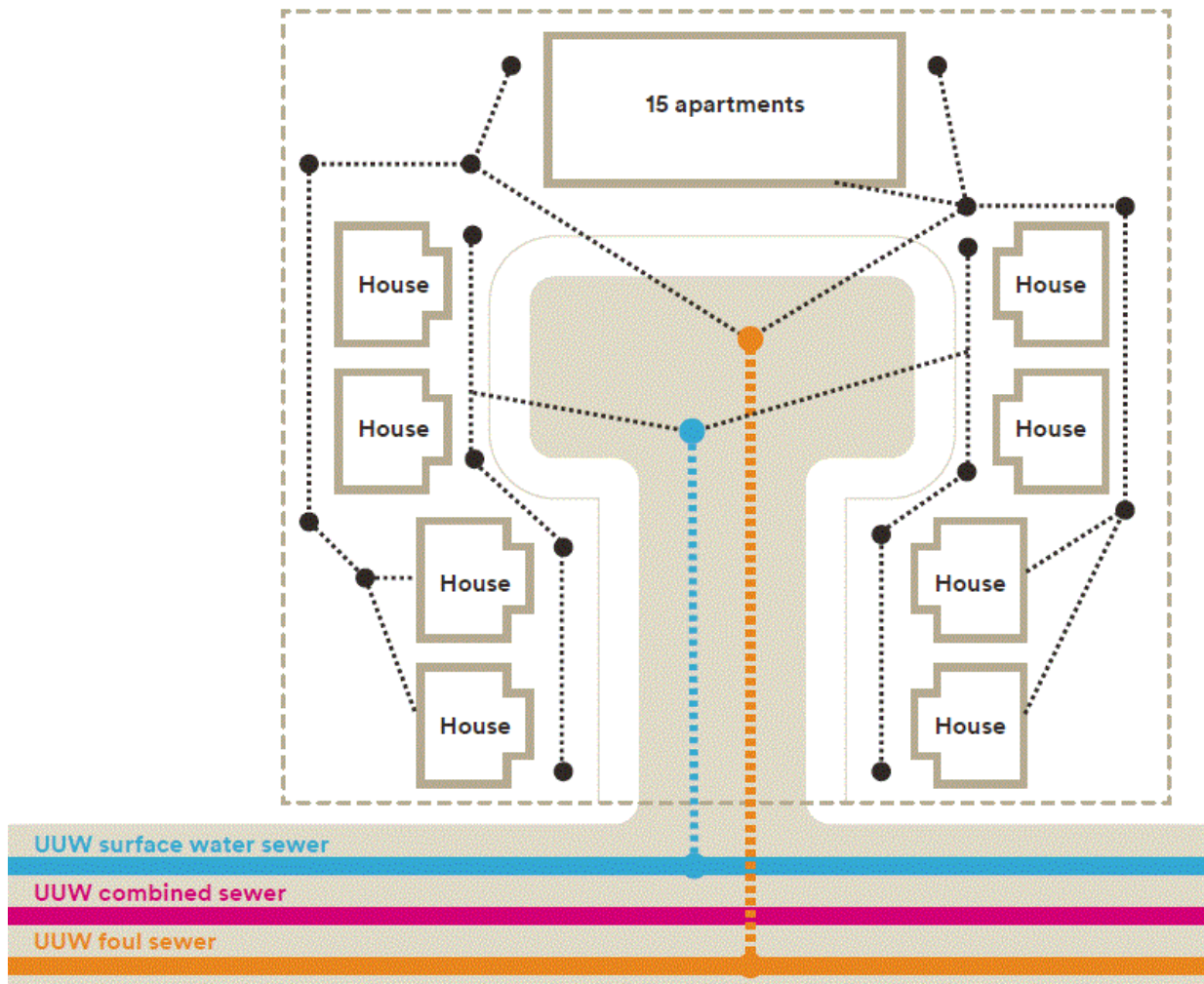
18.6 Sewer diversion example



| Diversion of public sewers - carried out by developer | | | | | |
|---|--|----------|-------------|--------------------|--------------------------|
| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
| Sewer lengths (m) | 300mm, combined sewer | 100 | £197.00 | £19,700.00 | 11.1 |
| Manholes | 1350mm manholes | 2 | £3,677.00 | £7,354.00 | 11.5 |
| Sewer abandonment (m) | 300mm, combined sewer, under 3m depth | 60 | £12.00 | £720.00 | 11.7 |
| Manhole abandonment | 1350mm manhole | 1 | £621.00 | £621.00 | 11.8 |
| Sewer connection | Sewer connection 225mm-300mm | 1 | £907.00 | £907.00 | 11.3 |
| Estimated value of works (for calculation of processing fee & security) | | | | £29,302.00 | |
| Diversion application fee | | 1 | £301.00 | £301.00 | 5.3.2 |
| Legal fees agreement | | 1 | £579.00 | £579.00 | 5.3.1 |
| Legal fees - easement | | 1 | £627.00 | £627.00 | |
| Technical assessment fee | 5% of estimated value of works | | | £1,465.10 | 5.3.2 |
| Total other charges (excluding security) | | | | £2,972.10 | |
| Security/deposit* | Cash payment or bond 100% of value | 1 | | £29,302.00 | 5.3.2 |
| Total diversion charges (including security) | | | | £32,274.10 | |
| *80% released once we confirm work carried out to appropriate standard. Remaining released on adoption. | | | | | |
| Diversion of public sewers -carried out by us | | | | | |
| Charge Description | Scheme Details | Quantity | Charge | Total Charge | Charges Scheme Reference |
| Sewer length (m) | Gravity sewers - 226 to 300mm Diameter - Urban - Up to 2.5m Depth | 100 | £1,143.00 | £114,300.00 | 10.1.2 |
| Manholes | Precast Concrete Ring Manhole - 1350mm nominal chamber diameter - 226 to 400mm Diameter - Urban - Up to 2.5m Depth | 2 | £10,635.00 | £21,270.00 | 10.2 |
| Connection | Gravity Sewer - Connections - 226 to 300mm Diameter - Urban | 1 | £3,251.00 | £3,251.00 | 10.1.1 |
| Indicative construction charges | | | | £138,821.00 | |
| Diversion application Fee | | 1 | £301.00 | £301.00 | 5.3.3 |
| Legal Fees - Easement | | 1 | £627.00 | £627.00 | 5.3.1 |
| Total other charges | | | | £928.00 | |
| Total diversion charges | | | | £139,749.00 | |

18.7 Sewer adoption (s104) example

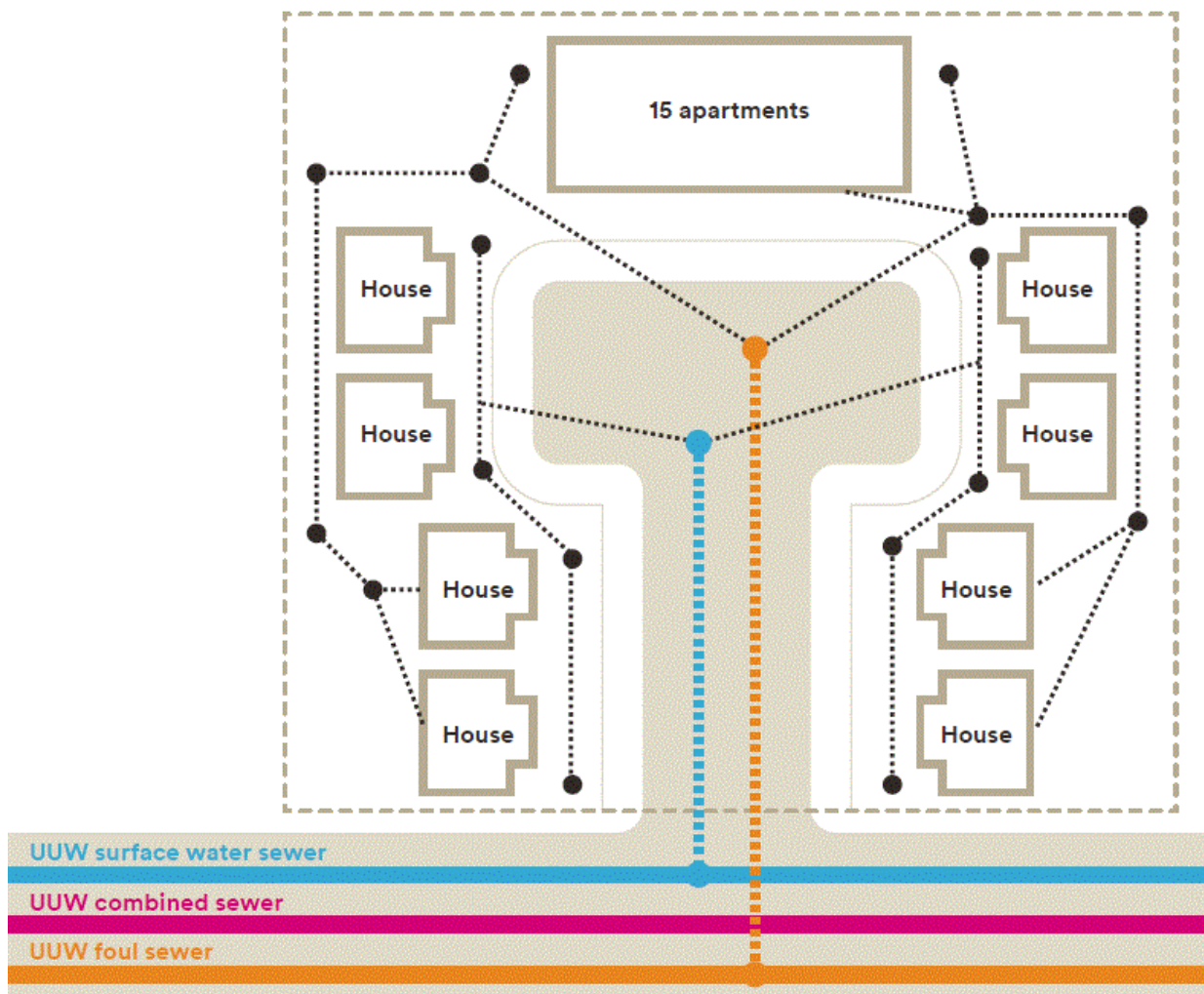
- Site boundary
- Surface water sewer (adoption proposal)
- Proposed new foul sewer (adoption proposal)
- ● New manhole



| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|---|----------------------------------|----------|-------------|-------------------|--------------------------|
| Sewer lengths (m) | 300mm, foul sewer | 300 | £197.00 | £59,100.00 | 11.1 |
| Sewer lengths (m) | 300mm, surface water sewer | 300 | £197.00 | £59,100.00 | |
| Manholes | 1350mm manholes | 4 | £3,677.00 | £14,708.00 | 11.5 |
| Sewer connection | Sewer connection 225mm-300mm | 2 | £907.00 | £1,814.00 | 11.3 |
| Estimated value of works (for calculation of processing fee & security) | | | | £134,722.00 | |
| Application fee | Administration charge | 1 | £1,163.00 | £1,163.00 | 5.6.1 |
| Processing fee | 2.5% of estimated value of works | 1 | | £3,368.05 | 5.6.3 |
| Legal fee for a sewer adoption | | 1 | £579.00 | £579.00 | 5.6.2 |
| Legal fee for transfer of land or provision of an easement | | 1 | £627.00 | £627.00 | |
| Total other charges (excluding security) | | | | £5,737.05 | |
| Security (sewers)* | 10% of estimated value of works | 1 | | £13,472.20 | 5.6.4 |
| Total sewer adoption charges (including security) | | | | £19,209.25 | |
| *Released on adoption. | | | | | |

18.8 Sewer Connection

- Site boundary
- Surface water sewer (to remain private)
- Proposed new foul sewer (to remain private)
- Private drainage
- New manhole



| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|---------------------------------------|--|----------|-------------|----------------|--------------------------|
| Processing fee - developer connection | Administration and assessment of the application, site inspection of completed connection (where required) | 1 | £188.00 | £188.00 | 5.4.1 |
| Total charge | | | | £188.00 | |

18.9 NAV Development example

| Charge Description | Scheme Details | Quantity | Unit Charge | Total Charge | Charges Scheme Reference |
|--------------------------------------|--|----------|-------------|-------------------|--------------------------|
| Self-lay application fee | | 1 | £227.00 | £227.00 | 4.3.1 |
| Application charge | | | | £227.00 | |
| Mains Connection (carried out by UU) | 90mm branch connection (Includes up to 2m of pipework) | 1 | £4,429.00 | £4,429.00 | 4.5.1 |
| Piece up (carried out by UU) | unsurfaced (50mm - 9mm) piece-up connection | 1 | £782.00 | £782.00 | 4.5.1 |
| Construction charges | | | | £5,211.00 | |
| Building water | Based on metered charges | | | | 8.2 |
| Infrastructure | Water infrastructure charge | 50 | £302.00 | £15,100.00 | 6.1 |
| | Water infrastructure credits | 0 | -£302.00 | £0.00 | 6.4.1 |
| | Sewerage infrastructure charge | 50 | £279.00 | £13,950.00 | 6.1 |
| | Sewerage infrastructure credits | 0 | -£279.00 | £0.00 | 6.4.1 |
| Income offset | No of plots | 50 | -£751.00 | -£37,550.00 | 7.1 |
| Other charges | | | | -£8,500.00 | |
| Total charges | | | | -£3,062.00 | |

*for the purposes of this example, it is assumed that this development consists of 50 plots and uses a metered connection for building water (see 8.2).

APPENDIX 8

Openreach

Will I have to pay to get broadband infrastructure installed?

1. Residential developments with more than 30 plots

What will I have to contribute?

Nothing – we'll install Fibre to the Premises (FTTP) for free.

What you need to do now

Register your site and we'll then draw up proposals for your site and send these to you.

If your company already has a framework agreement with us, you won't need to sign anything else – we'll produce proposals for you straight away. (If you'd like to find out more about framework agreements, please **get in touch**.)

2. Residential developments with less than 30 plots

What will I have to contribute?

If you want your new homeowners to have access to the fastest broadband speeds in the UK with FTTP, you can contribute towards the cost of installing this (**find out what it might cost**). We'll send you the costs once you register your site.

Not sure whether FTTP is for you? **Read about the benefits**.

We'll build copper or fibre to the cabinet (FTTC) infrastructure for free. We only build Fibre to the Premises (FTTP) technology for free at sites with less than 30 plots if it's cheaper than copper or Fibre to the Cabinet (FTTC) (we'll decide this once we look at your registration information).

What you need to do now

Register your site and we'll send you agreements for copper/FTTC, and also the costs for installing FTTP (including the details of the available network for your site and the speeds you should get with this).

Once you get these you'll need to sign the agreement you want to enter in to and send it back to us. We'll then draw up proposals for your site and send these to you.

3. Single properties

What will I have to pay for?

It depends on your situation.

If you know who's moving into the property, and you want broadband right away

If you'd like a copper connection, please contact a broadband provider to order this (you'll need to let them know that you're building a new, single plot home). They'll then organise for one of our survey officers to come to your site to agree how and when we can get broadband in place. You might have to pay for this.

If you'd like a Full Fibre connection, first use our **fibre checker** to make sure you can get fibre in your area. If you can, you'll then need to contact a broadband provider to organise this. Find broadband providers offering **Fibre to the Premises (FTTP)** and **Fibre to the Cabinet (FTTC)**.

If you don't know who's moving in but you want to get broadband infrastructure in place

You can ask us to install the network in advance so the connection is ready when people move in. You'll have to pay for this. We'll install a copper connection, but please use our **fibre checker** to see if you can get FTTC.

4. Commercial properties

We install Fibre to the Premises (FTTP) broadband on commercial sites, as long as it's available in your area. We'll need to carry out a survey of your site before we can do this.

What will I have to contribute?

For FTTP, we'll contribute £1,000 per commercial plot towards the cost of installation. So you'll only have to pay anything if it's more than this.

If you want to have copper installed instead, you'll have to pay for this yourself.

What you need to do now

Fill in the registration form and we'll contact you to talk through what's available and how much it'll cost (if anything). You'll then need to fill in and sign an agreement so we can draw up proposals for your site.

5. Other things to note

Residential property means homes or flats with their own, individual addresses, where each resident pays council tax. Commercial property is any property that's used for business purposes. It will have its own address and pay business rates.

If a property is empty or defined as 'not habitable' by the local council, we can't put any broadband infrastructure in place.

It'll be the new home owner's responsibility to order broadband from their chosen provider when they move in – we only put the infrastructure in place to make sure they can get this (as we don't sell phone or broadband services).



Connecting you to your network

www.openreach.co.uk

The telecommunications services described in this publication are subject to availability and may be modified from time to time. Services and equipment are provided subject to British Telecommunications plc's respective standard conditions of contract. Nothing in this publication forms any part of any contract. Openreach and the Openreach logo are trademarks of British Telecommunications plc. © British Telecommunications plc 2018.

Openreach Limited
Registered office: Kelvin House, 123 Judd Street, London WC1H 9NP.
Registered in England and Wales no. 10690039.
Produced by Openreach.
Published October 2019.
Printed on recycled paper.
Designed by Chilliblossoms Limited.
OP1.1910.0098A

**The blueprint for a
full fibre future**



Contents

- Seizing the opportunity _____ 2
- Delivering for the whole nation _____ 6
- Accelerating the build _____ 8
- No-one left behind _____ 12
- About Openreach _____ 14

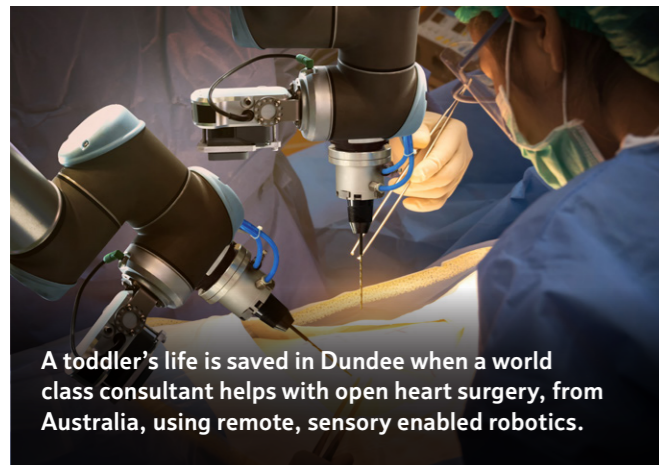
Seizing the opportunity



An entrepreneur showcases their latest product design to suppliers in Birmingham, Tokyo and Sydney – all via a 3D hologram – without leaving home in Belfast.



A clothing company in Salisbury triples sales in a year, taking on four new employees thanks to the ultrafast, cloud-based processing behind their new website.



A toddler's life is saved in Dundee when a world class consultant helps with open heart surgery, from Australia, using remote, sensory enabled robotics.



An aspiring musician puts on her VR headset in rural Pembrokeshire and takes a seat next to their idol, who's performing in front of thousands at the Royal Albert Hall.

This is a glimpse of our full fibre broadband future. Delivering gigabit speeds of up to 1,000Mbps, it is the most reliable, fast, and future-proofed digital infrastructure and will become the backbone of our economy for decades to come, supporting every aspect of our public services, businesses, industries and daily lives.

Research published by Centre for Economics and Business Research (Cebr) in October 2019 shows that nationwide full fibre could boost UK productivity to the tune of £60 billion by 2025.

And over the next decade, having world-class connectivity at home could help 400,000 more people avoid the commute. They can be launching new businesses or working from wherever they choose to live – reversing a hundred-year trend towards moving to big urban centres. The new network can unlock job opportunities for people otherwise left behind – such as carers, older people and parents looking to return to work. It can transform our public services, unleashing innovations behind better education, healthier longer lives and more connected communities.

Full fibre will make our experience of the internet more slick, secure and reliable – with minimal faults. It is not affected by

poor weather and the extra capacity it delivers means no more buffering videos, no more connections slowing down and no more interruptions when everyone's using the connection at home or in the office.

We're setting the pace

At Openreach, we're excited to be making this vision a reality. We're already leading the way, having reached more than 1.8 million homes and businesses with full fibre. And our engineers are building the new network to more than 23,000 premises each week – that's a home every 26 seconds.

We're continuing to increase the size and scale of our deployment and we're on-track to reach four million premises by March 2021. Our ambition is to upgrade the majority of the country and, with the right support, we could scale-up our build to over three million premises a year. We believe no one

should be left behind. It's important to find a way to support build in both urban and rural areas across the UK, reaching communities no matter where they are.

The National Infrastructure Commission has estimated that building and maintaining a nationwide full fibre network by 2033 would cost £33.4 billion. The majority of this will be paid for by industry, so it's vital that the right conditions exist to incentivise that private investment and maximise the speed and scale of build.

From Leeds and Liverpool to Cardiff and Glasgow we're already investing billions of pounds into our new network and our people. We're building 12 new training schools across the

country and we've hired and trained 6,500 new apprentice engineers over the last two years in communities across the UK. We expect to hire and train many more in the years ahead, as we continue to ramp up our build.

We welcome the Government's announcement that £5 billion will be invested to support the build of gigabit-capable infrastructure for the hardest to reach 20% of the UK. But improving connectivity for every household in the UK by 2025 needs the industry to build at a faster pace than virtually any other country has achieved. It will require decisive and coordinated action from Government, the regulator Ofcom and the wider telecoms industry to make it a reality.

We believe:

01

Delivering for the whole nation requires an open and competitive market across the majority of the UK.

We believe in competition and we want all consumers and businesses to benefit from the highest standards across the whole country. The Government's Future Telecoms Infrastructure Review (FTIR) established competition as the key driver for investment across most of the country, and this should be supported by a regulatory framework which allows for an open and competitive market. We believe that with the right regulatory framework up to 90% of the UK could be attractive for full fibre investment by the private sector.

02

The speed of fibre rollout could be turbocharged by removing barriers.

We need easier access to land, properties and apartment blocks. This will make it easier for companies like us to upgrade connections into buildings by installing new fibre optic cables. A simple and streamlined system for streetworks is also required so that we can upgrade the network efficiently.

03

No-one should be left behind.

Whether it's remote rural communities or vulnerable, less tech-savvy customers, we want to bring everyone with us. That's why we need to see build in both rural and urban areas to ensure networks reach every community across the UK. Only if everyone plays their part in reaching some of the hardest to serve areas of the UK with full fibre, will we have delivered on our ambition.

The UK's full fibre future is within reach. Together we can create a more connected and competitive economy, help to ease the demand on our public services and transform the way people are able to live and work.

Why full fibre?

Full fibre-to-the-premises (FTTP) broadband is the most reliable, fast and future-proof compared to other broadband services. It's a fibre optic connection running all the way from a local exchange directly to the customer's home or business. And once it's installed, it can be upgraded without being dug up or replaced for the next 100 years.

More than 95% of homes and businesses in the UK can access superfast broadband (speeds of 30 Megabits per second) today, and that will meet most people's needs for the foreseeable future. But with consumers using 40% more data every year and new applications emerging every month, it can only be a stopgap in the long-term.

To keep up, we need a new full fibre network which is ultra-reliable and 20 times faster than existing superfast broadband services. It will be the backbone of an economically prosperous, globally connected and competitive UK. A platform for our daily lives that keeps the UK at the forefront of digital growth.

Full fibre broadband: a platform for UK growth

£59bn

boost to UK productivity by 2025
powered by nationwide rollout of full fibre

300m

commuting
trips saved

by people working
from home because
of full fibre including
three billion kilometres
fewer travelled by car

Nationwide rollout of
full fibre could increase
productivity by
£1,800
per person

500k

back in to the workforce

Nationwide full fibre could bring
half a million people back into
the workforce by 2038

270k

people could move to rural areas

People free to live and work where they choose
because of full fibre, helping to fuel growth

400k

more people could
work from home

400,000 more people could work
from home helping people to avoid
the commute, and have greater
choice about where they live

£70bn

boost to the
economy by 2038

Nationwide rollout of full
fibre broadband will boost
the UK economy by £70 billion
by 2038

2021

82.5m VR/AR
headsets will be sold

By 2021 it is expected that 82.5 million VR/AR headsets will be sold and shipped around the world. This compares to 70.6 million PlayStation 4 units being sold from its launch in 2013 to 2017 globally.

2021

video will make up
80% of all internet
traffic in the UK†

Data usage is growing 40% each year, mainly driven by people watching on-demand TV like Britbox and Amazon Prime. By 2021, video will make up 80% of all internet traffic in the UK.†



FTTP is a full fibre line which runs all the way from the exchange to your home or business. Because it's not affected by the weather like copper lines can be, it's also far more reliable – so your signal won't cut out or 'buffer'.§



For many businesses, high value work is being conducted in rural and remote locations. This includes the 91% of farm businesses that say that broadband is an essential tool for them to run their business.‡

103

locations

103 locations have now been included in Openreach's multi-billion-pound Fibre First build programme, including the UK's biggest cities (Birmingham, Belfast, London, and Manchester)¥



† Openreach, Future-proofing the UK: Our annual review 2018/19

§ Openreach, 'Ultrafast full fibre infrastructure for smaller new build sites'

‡ Confederation of Business Industry, Ready, Set, Connect: Delivering a roadmap to supercharge the UK's digital infrastructure, (7 December 2018)

¥ Openreach, 'Futureproof broadband coming to 29 new locations as Openreach accelerates its nationwide build programme', (02 October 2019)

Delivering for the whole nation

We believe everyone in the UK should get access to the best broadband technology providing gigabit-capable speeds. We also believe that full fibre is the most future-proof way of delivering this. With the right regulation, up to 90% of premises could be attractive for commercial investment.

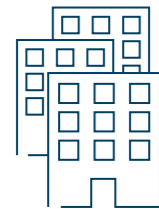
We think that everyone should be able to benefit from the same level of service wherever they live.

We believe the Government and Ofcom should support:

With the right regulation, up to

90%

of premises could be attractive for commercial investment.



An open network. The UK needs a network that every Communications Provider can use, and every consumer can tap into. The Government and Ofcom have set competition as the key driver for investment across the country and this will help unlock a commercial case for companies to build across most of the UK.

Upgrade. We have set out some key principles for how we upgrade our people to our new network. These include taking an exchange-based approach, offering new products, and an emphasis on voluntary migrations. We want the experience to be a positive one for consumers. We expect most people to upgrade voluntarily, but ultimately migrating our customers from legacy copper services to our new fibre network requires an 'upgrade' moment. Pricing will be an important lever, including a higher cost for copper-based services that encourages the switch, allows costs to be recovered and unlocks further investment. We are working closely with the industry to do this with minimal disruption and as quickly as it's practical to do so.

A consistent investment environment. Building full fibre infrastructure is a long-term investment which will only deliver a commercial return for private investors over decades. We need a consistent and long-term regulatory framework that supports investment and competition. The priority must remain on delivering the infrastructure that the UK needs, at pace. We believe that with the right regulatory environment, up to 90% of the UK could potentially be commercial for full fibre investment and build.

Driving awareness and demand. To achieve the best results for businesses and consumers, and to generate the return on investment required, we need to create an awareness of – and demand for – full fibre. We will need to work collectively across the whole industry to explain the fantastic benefits full fibre brings businesses and consumers. Only around 50% of the country has so far chosen to upgrade to existing superfast services, so clearly there's a big challenge ahead in getting everyone to make the jump to ultrafast.

We're working with Communications Providers to develop a range of attractive packages, but – as with the Digital TV switchover – we may need to promote the benefits of full fibre to both the industry and the end users through a public information campaign.

What is an open network?

An open network like ours means all our services are available to everyone at equivalent prices and under the same Terms and Conditions, no matter who is buying them.

Openreach customers are Communications Providers (currently 620 and increasing) – companies like BT, Sky, TalkTalk, Vodafone and Zen. They use our network to offer a huge variety of services, driving competition, lower costs and providing more choice to families and businesses across the UK.

Full fibre allows the whole family to share



Arguments were rife. Shaun Duffield from Leeds says his old broadband simply couldn't keep up with the demands made by the family's gaming consoles, smart TVs and smart phones.

As a dad of eight children with twenty online devices between them, Shaun is no stranger to noisy arguments.

Reliable ultrafast fibre broadband has made bickering over who gets to stream their favourite show or game a thing of the past. Now they can all do what they want whenever they want.

8 children

Shaun Duffield
dad of eight children
Leeds

20 online devices

The next level for an Esports revolution

The Esports industry is on the rise. Whether it's 1,000 people playing Fortnite or single player FIFA enthusiasts, one thing's for sure – if you're going to win, a fast, smooth, reliable internet connection is crucial.

For the British Esports Association (BEA), a not-for-profit national body established to promote Esports across the UK, this has never been more vital. It runs the British Esports Championships to schools and colleges, with 170+ teams taking part, and connection problems often result in delayed or interrupted matches.

Full fibre can bring an end to all that – and not only at marquee events and tournaments. It will allow the average gamer to play competitively from home, without the disadvantages and inevitably 'taking the L' that poor connectivity brings.



Accelerating the build

Installing a nationwide full fibre network is a huge task. It's one of the largest privately funded civil engineering projects in the UK, employing tens of thousands of people.

Our ambition is to reach 15 million homes by the mid-2020s, and we want to do even more. But we need the right conditions to achieve that.

Action from the Government and the regulator is vital to help accelerate the rollout and make sure there's an opportunity for investors to get a fair return. The following changes are crucial:

Removal of business rates that penalise fibre build and ambition. Business rates are one of the biggest blockers to investment in full fibre so we're asking for the sector to be exempt from business rates in order to stimulate more investment. Currently there's a relief on business rates until 2022, but payback on digital networks takes decades, so investors need a clearer long-term commitment by the Government.

The current business rates system limits UK investment in deploying and adopting digital infrastructure improvements.

CBI: Ready, Steady, Connect, December 2018

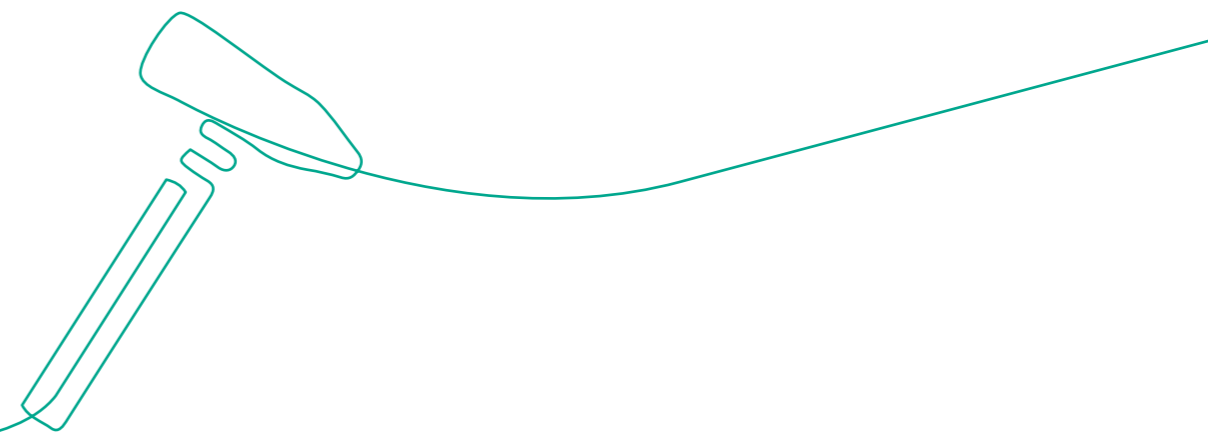
This has already happened to help support investment in the renewable energy sector and the Treasury wouldn't see a decline in its current business rate revenue in the short term, as rates would continue to be paid on the existing copper network. And the economic uplift from a full fibre network would result in greater tax revenues in the future whilst maintaining the UK's competitive edge.

Accessing multiple dwelling units (blocks of flats) and Local Authority buildings. Today we struggle to access 44% of the UK's flats and local authority buildings, meaning increased costs and delayed installations. Other utility companies – water, electricity and gas – don't suffer the same restrictions to property access, and we believe network builders would benefit from having similar rights.

It's incredibly frustrating, we're just stuck in this legal limbo. The freeholder doesn't have to pay anything, there is no liability, all they have to do is sign an agreement giving Openreach permission to lay cables.

Tim F, who lives in an apartment block near the Gherkin, central London

Local authorities can also significantly speed up the build by granting us permission to access their buildings and the land and premises where they have control.



66

The complex structure of property ownership in the City and central London has led to delays in delivery due to Openreach and other operators struggling to engage building owners and their managing agents to seek wayleaves for the installation of ultrafast broadband. We are working with our long leaseholders and other major building owners in the Square Mile to engage operators on this important issue. Our draft 'City Plan 2036' also includes the need for full fibre to be installed in all new developments throughout the City.

A City of London Corporation spokesperson

99

Mandating fibre in new build developments. More than 165,000 new homes are built each year. Every one of these new homes should have access to an open, wholesale full fibre network – bringing choice and competition to homeowners. Today we offer to build full fibre infrastructure for free to any development with more than 30 homes and we share the cost on smaller sites. But mandatory full fibre for new builds would ensure no new homeowner gets left behind. We could also expand the network faster if full fibre was mandated to be installed when buildings, like offices or blocks of flats, are refurbished.

More efficient streetworks and traffic management. We know how annoying it is for people to be held up by roadworks when utility suppliers are upgrading and repairing their networks. That's why we always try to exploit our existing network and work in tandem with other utility suppliers. When we have to do some digging or close a road, the advantage of fibre over copper, is that once it's laid, we won't need to touch it again. It can carry increasing levels of data and it's weatherproof. We believe priority should be given to building this new digital network – which would speed up the build and reduce costs.

66

Openreach have chosen Liverpool because of our efforts to work with them on making this investment possible. And we will make this work, because the benefits are massive for our city.

Joe Anderson, Liverpool Mayor

99

Attracting and training the right talent. We've hired 6,500 engineers over the last two years, and they're being trained at our new schools dotted across the UK. They're part of our 33,000 strong team, but achieving the government's ambition requires a huge civil engineering programme which will need an even bigger skilled workforce across the whole industry. That's why it's vital that Openreach and our civil engineering suppliers can continue to get access to the right people – even if they're from outside the UK.

Openreach is one of the largest employers of ex-armed forces people in the UK. It runs a highly successful Transition Force programme, which has supported more than 1,500 veterans from all ranks, including the wounded, injured and sick, in their move from military life into civilian employment.

Cheryl Burgess, an ex-military officer swapped the cockpit of a fighter jet for a career at Openreach and says:

66

Openreach is a great place to work, with a strong sense of community and everyone is extremely supportive.

Cheryl Burgess, Openreach

99

Continued access to a helpful international trading environment. We have a global supply chain which means that many of the components in our network are manufactured by international suppliers. We take the security and stability of our network very seriously and like the rest of the industry, work closely with the Government and security agencies to ensure this. A diversified supplier base improves the quality of our network, innovation and value of the services we offer. For that to continue, it's critical that we can access a wide range of suppliers, wherever they're based. It's important that the Government considers this as it continues to review UK supply chains.

Leading innovation from the heart of a cathedral city

At Openreach, we believe UK businesses should be able to thrive in the global marketplace, wherever they're based. We want to upgrade villages, towns and cities across the country to full fibre, no matter how challenging the location, or how ancient its streets.

Thanks to Openreach's pilot project to upgrade the entire city of Salisbury, we're now delivering fibre optic broadband cables directly to more than 20,000 premises there. Cutting edge businesses such as 'Innovate – helping inventors' and its 30 employees can now operate and grow from the picturesque setting of one of England's oldest cities, connecting seamlessly to satellite offices in London, Paris and San Francisco.



66

Full fibre will greatly improve communication tools, such as video conferencing, to accelerate the expansion of our business overseas. In addition, it will revolutionise the time it takes to complete a project, with the heavy-duty 3D CAD processing being outsourced to the cloud. We will be able to offer a world-class service while enjoying the Salisbury city life and beautiful surrounding countryside.

Alastair Swanwick, Managing Director, Innovate – helping inventors

99

Innovating as we build

The challenges of building a new network are tough. So, we're always looking for ways to work smarter and encouraging our people to challenge the way we do things, put forward new ideas and improve the way we deliver for our customers. We also spend millions of pounds on R&D and working with our industry partners and suppliers which has led to us coming up with new and better ways of building.

We know, for example, digging trenches on private land to lay a duct is never popular. So we're road-testing a new piece of kit called the GeoRipper. A blade carves a narrow trench into soft ground, allowing us to lay small fibre cables of up to 150 metres. The GeoRipper is ten times faster than digging these manually, and leaves everything much tidier.

Another good example is the optical network termination (ONT) which is a box of electronics that sits on a customer's wall. It has four data ports and two voice ports. Our customers don't use all of the ports, so we're developing a smaller version with one data port and one voice port. It's a third of the cost of the ones we use at the moment. And we hope customers will be happier too, because it'll take up less room.

No-one left behind

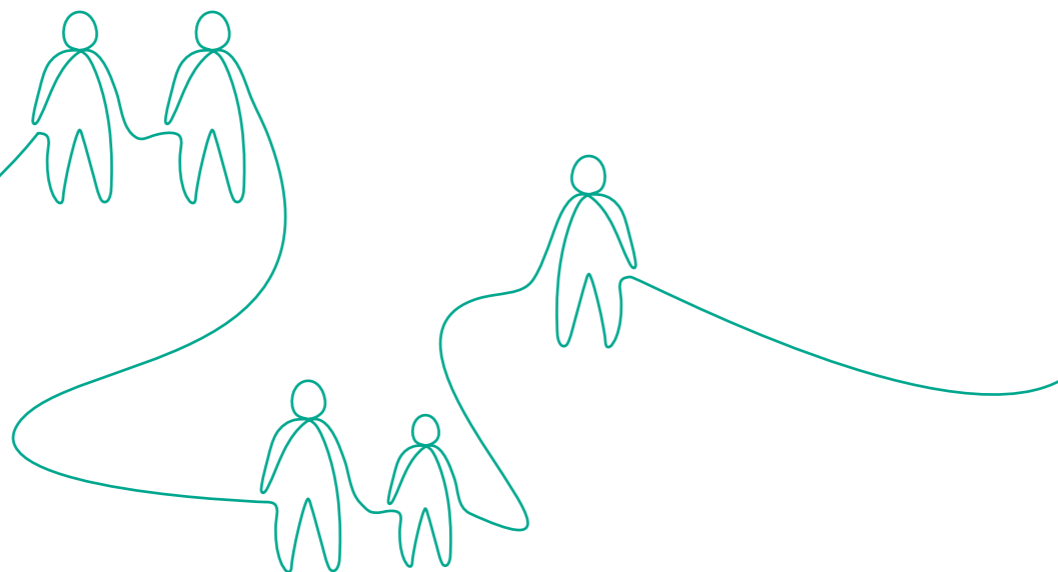
We believe every community has the right to enjoy great connectivity, and as we upgrade our network, we also need to ensure that everyone, including our most vulnerable customers, are supported.

Building full fibre in less dense, and rural areas is complex and brings with it a unique set of challenges, but we want no one to be left behind. That's the reason we've signed up 100,000 UK premises through our co-funded Community Fibre Partnerships scheme and it's why we're working with Government to connect premises through the Building Digital UK (BDUK) programme.

We welcome the recent news of a £5 billion investment for gigabit-capable infrastructure for the UK's hardest to reach communities. But there is much more to do to ensure rural communities benefit:

We believe:

- 01 A 'balanced-build' approach – ensuring digital parity across urban and rural UK.** Openreach is not just a city fibre broadband builder. We're committed to delivering full fibre in the UK's rural communities and we believe other network builders should be investing in rural too. There are already a number of programmes to improve broadband speeds in rural areas and we need the Government to look at how programmes like BDUK, Reaching 100% in Scotland and Stratum in Northern Ireland will interact with these new funds. We also need these new funds committed quickly to make sure that rural communities see benefits soon.
- 02 Supporting commercial investment in the final third of the UK.** We believe public funds should be focussed on the hardest to reach 10% of the UK, where there's no possibility of commercial investment by the private sector. However the Government may also be able to support commercial full fibre investment in rural areas beyond this 10% – perhaps by targeting funding for upgrades at rural schools and other public buildings.
- 03 Protecting customers.** We need to ensure that whilst we upgrade the country, we don't leave anyone behind, and we protect vulnerable customers. We're working with the Government and Ofcom to ensure that we get the right consumer protections in place by running trials in Salisbury and Mildenhall. These trials will help us to work with phone and broadband providers to understand what's required to upgrade people smoothly to the new network. We plan to publish a Consumer Charter which will set out our commitments to protecting consumer interests. And we're working closely with Ofcom as it consults with the whole industry on this important issue.



Our commitment to rural communities

Pembrokeshire Investing in our children

The 22 pupils of Ysgol Llanychllwydog in Fishguard, rural Pembrokeshire, are an unusual lot for two reasons: they were the only school in Wales without broadband and they couldn't wait for the start of the new school term.

Thanks to Openreach's Community Fibre Partnership Programme, which is designed to connect hard-to-reach places, by the time the students' summer holidays ended, their school had a new, ultrafast connection.

By working with the Department for Digital, Culture, Media and Sport, Openreach helped this small Pembrokeshire community to unlock funding that has made slow internet a thing of the past. By supporting the community to draw on the Rural Gigabit Connectivity programme's voucher scheme Openreach has been able to lay fibre optic cables along a 15-mile route from Haverfordwest, at a much-reduced cost.

The work has been a huge challenge, involving ploughing 1.5 miles of new trenches to put new ducts in, installing new poles and spanning cable between 50 poles.

Teacher Amanda Lawrence had to drive 10 minutes to her other school to send an email every time the internet went down.

—66—

It's frustrating. There are lots of schools that are able to use schemes where you can plan electronically, but it was difficult for staff here to do that.

Amanda Lawrence,
Teacher

—99—

Now, Amanda will be able to give her pupils all the benefits interactive learning and modern education has to offer.

Connecting one of the most remote communities in the UK

The extremely isolated Sutherland hamlet of Altnaharra, in the Highlands of Scotland, now has some of the fastest broadband speeds in the world.

Around 60 Altnaharra households and businesses are able to order more reliable, ultrafast, full fibre broadband over a network capable of carrying services up to 1Gbps – around 22 times faster than the current UK average. Until now, due to the high cost of bringing faster broadband to very small communities in remote areas, many of the villagers had been making do with some of Scotland's slowest connections of around 0.5Mbps.

—66—

We can compete with anyone. Even though we are a traditional hotel from the 1800s. Openreach did us proud with what we have and changed lives in the village quite dramatically.

Manager
Altnaharra Hotel

—99—

We've reached 100,000 homes and businesses with our Community Fibre Partnership programme

Openreach's Community Fibre Partnership (CFP) programme is helping to ensure those harder to reach communities are not left out of this digital revolution. Through a CFP, Openreach works with a local community to build a customised solution to bring fibre broadband to homes and businesses in their area. We do this by putting a joint funding arrangement in place, which means we contribute to some of their costs.

Openreach has partnered with the Government's new Rural Gigabit Connectivity (RGC) voucher scheme, launched in May 2019. This has helped provide funding to support the cost of installing new FTTP or gigabit-capable connections in the hardest to reach communities.

The CFP programme shows Openreach's commitment to never say no to any community that wants better, fibre broadband connectivity. Openreach will work with anyone and everyone to find a way forward.

About Openreach

When it comes to the country's essential broadband infrastructure, no company is investing more, building faster or aiming higher.

Openreach was created following Ofcom's strategic review in 2005, ensuring all Communications Providers have fair access to the phone and broadband network, previously controlled by BT. We are a legally separate, independently governed wholly owned subsidiary of the BT Group.

Our team of telecoms experts build, maintain, and manage more than 173 million kilometres of cable stretching from Scotland to Cornwall, Wales to Northern Ireland.

Reliable broadband, faster speeds, broader coverage and better service, one home and business at a time, 25,000 customers every day, eight million completed jobs every year. This is what we at Openreach are proud to provide.

We've already accelerated the nation's fibre rollout, laying down enough fibre to reach the moon and back, while continuing to reduce build costs.

We are a business that is at the heart of the community, hiring more apprentices than any other private sector business in the UK – many of whom are ex-service men and women – and building new training centres across the country to support our 25,000 skilled, trained engineers.



Building the largest fibre network in the UK

1.8m

Homes and businesses

Last year we accelerated our fibre build programme, doubling our FTTP footprint to 1.2m, building at a run rate of **23,000 premises per week**, using a number of innovative solutions such as ribbon cable and optical test head.

4m

Homes and businesses

We plan to **hire a further 3,000 trainee engineers** over the coming year to underline our ambition to be the UK's national 'full fibre' broadband provider. We're now committed to build to **4m by the end of March 2021**.

15m

Homes and businesses

This sets us on the right trajectory to achieve our current ambition of reaching **15m with FTTP by 2025**, if the conditions are right, and to go on to reach the majority of the UK.

Announced 103 FTTP locations

Northern Ireland

| | | | |
|--------------|-------------------|--|----------------------|
| Antrim | Carrickfergus | Greater Belfast (Carrduff & Castlereagh) | Newcastle |
| Armagh | Coleraine | Greater Belfast (Newtownabbey) | Newry |
| Ballyclare | Cookstown | Larne | Newtownards & Bangor |
| Ballymena | Craigavon | Limavady | Omagh |
| Ballymoney | Derry-Londonderry | Lisburn | Portrush |
| Ballynahinch | Downpatrick | Magherafelt | Portstewart |
| Banbridge | Dungannon | | Saintfield |
| Belfast | Enniskillen | | Strabane |

Great Britain

| | | | |
|--------------------|---------------------------|------------------------|---------------|
| Aberdeen | Burgh Heath | Leeds | Salford |
| Aughton | Bury | Lichfield | Salisbury |
| Ayr | Cardiff | Liverpool | Sheffield |
| Balham | Chelmsford | Manchester | Slough |
| Barking & Dagenham | Chorleywood | Merton | Solihull |
| Barri / Barry | City of Edinburgh | Molesey | St Albans |
| Basingstoke | City of London | Newbury | Stancastle |
| Bathgate | Coventry | Newcastle-upon-Tyne | Stockport |
| Bexley | Croydon | Northampton | Swansea |
| Billericay | Derby | Norwich | Swindon |
| Birmingham | Doncaster | Nottingham | Thames Ditton |
| Bradford | Epsom | Ormskirk | Tonbridge |
| Brentwood | Ewell | Ramsgate | Torquay |
| Brighton | Exeter | Redbridge | Watford |
| Bristol, City of | Greater Glasgow | Richmond upon Thames | Whitburn, |
| Broadstairs | Harrow | Rickmansworth | West Lothian |
| Bromsgrove | Hatch End | Royal Sutton Coldfield | Wickford |
| Broxburn | Kilmarnock, East Ayrshire | Royal Tunbridge Wells | Wirral |
| | | | Worthing |

Contact

For media enquiries, please contact: press@openreach.co.uk

Or, if we can be of assistance for any constituency issues please contact: public.affairs@openreach.co.uk

For any specific constituency case work you can also contact our dedicated team at: parliamentary.help@openreach.co.uk



Twitter
<https://twitter.com/WeAreOpenreach>



LinkedIn
<https://www.linkedin.com/company/openreach/>



Facebook
<https://www.facebook.com/WeAreOpenreach/>



How to build a fibre network

Developer Guide

Version 9.1 • October 2019



Contents

01 Internal equipment

02 Home wiring

03 Developer self-install

04 Cabling and ONT positioning

05 Multi dwelling Units (MDUs)

06 Commercial units

07 Duct laying

08 Modular jointing chambers – Quadbox™

09 Joint boxes, footways and frames & covers

10 List of abbreviations and acronyms

11 Health and safety advice

12 Quality control checklist

13 ONT plot stickers

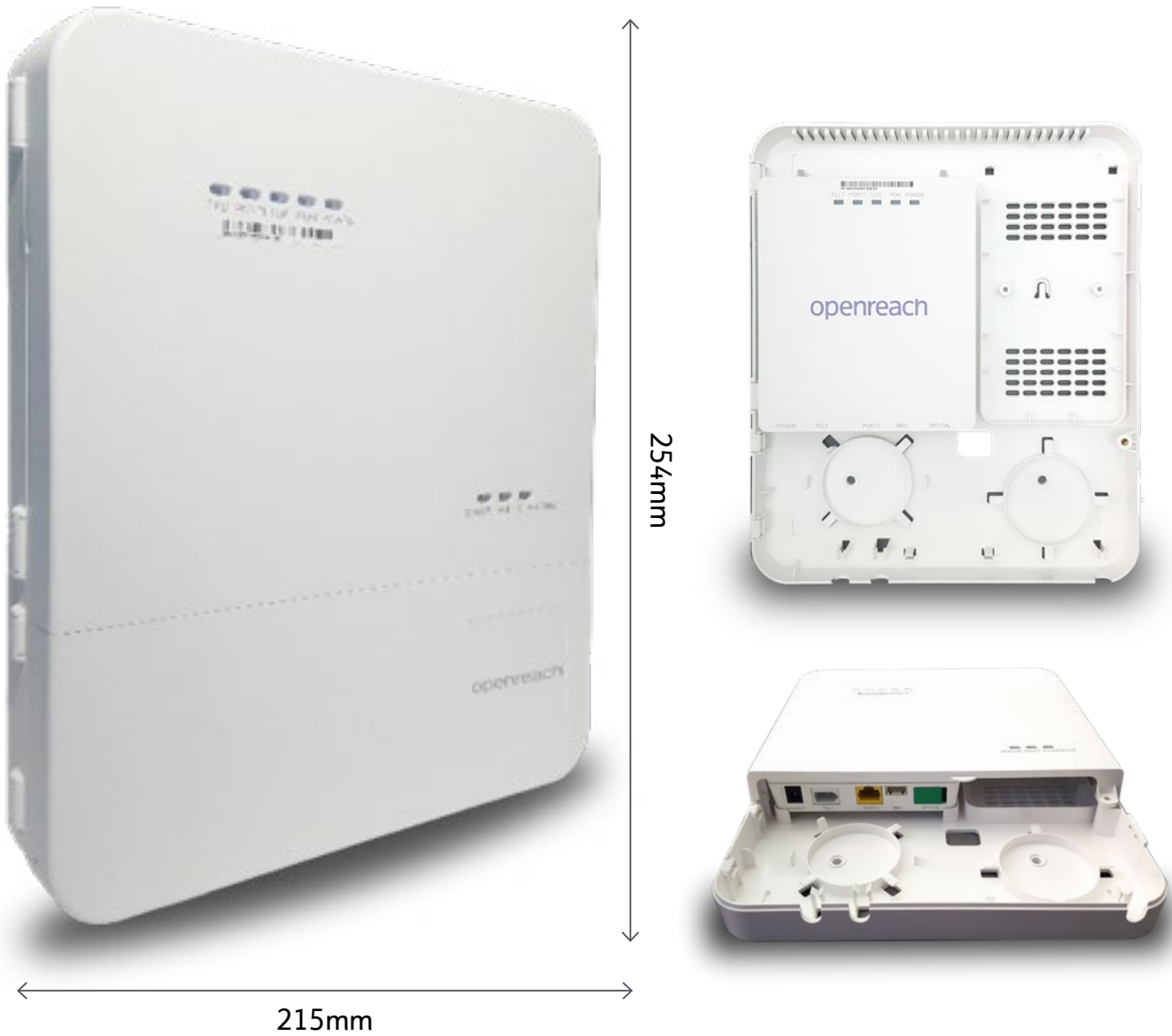
1 Internal equipment

Openreach Optical Network Termination (ONT) and enclosure

The ONT is the Openreach demarcation point. It replaces the traditional copper master socket.

The Openreach ONT sits in an enclosure providing space to manage the wiring, keeping everything neat and tidy. The enclosure is designed for simple wall mounting with just 2 screws.

- Optical port connects to the connectorised internal fibre cable
- Ethernet port connects to the communications provider’s (CP) router.
- Telephony port connects to voice network.



2 Home wiring

The wiring that you install in your customer's properties is pivotal to their experience.

Your options in the installation of internal wiring are shown as below

Implications of locating the service provider's router in a cupboard

It is important to note that the Wi-Fi service your customer receives is dependent upon the intended location of the communication provider's router. Placing the router in a service cupboard or under stairs cupboard will significantly reduce the speed and coverage your customer will receive.

It is highly recommended that if you position the router in this way that you provide additional RJ45 ports within the home.

Ideally for optimum speeds to be enjoyed using Wi-Fi service it is recommended that you locate the router centrally within the property.

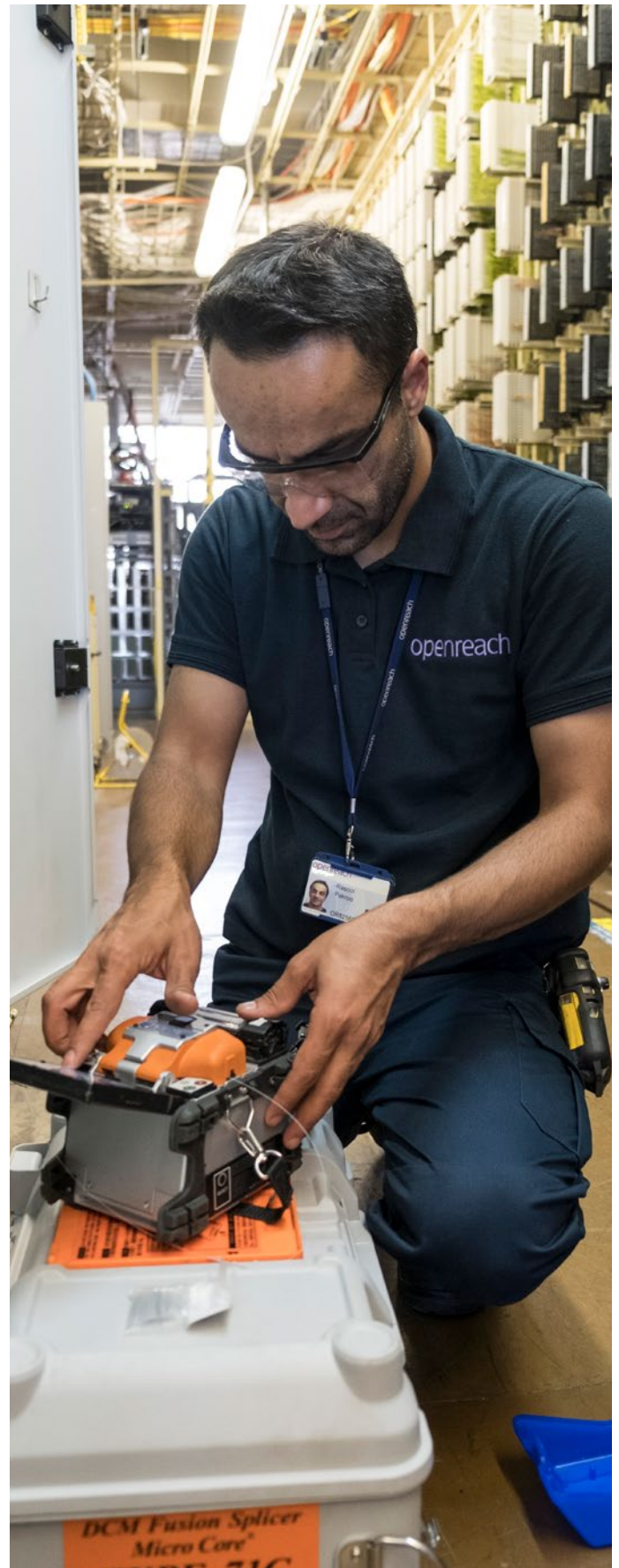
For information, advice and guidance around positioning, please refer to: PAS: 2016 Next Generation Access for new Build Homes Guide.

Please note

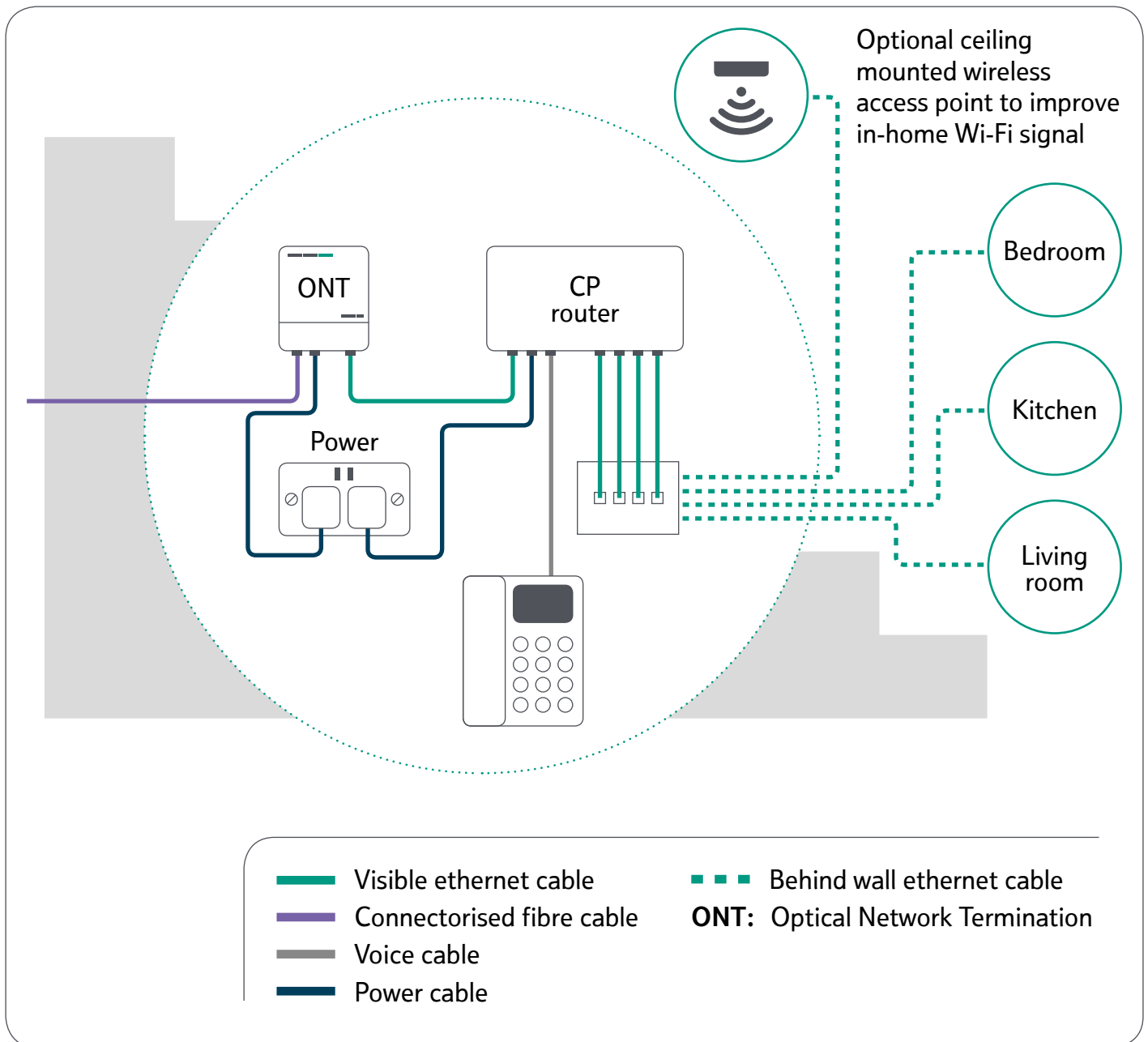
All internal wires and sockets beyond the ONT are the responsibility of the developer/ future home owner.

If any part of the connectorised internal fibre cable is found to be damaged at commissioning, it is the developer's responsibility to replace it.

If the homeowner experiences a lack of service or poor service, which is due to a fault within the internal installation of wiring, which requires Openreach to rectify, the homeowner will be charged.



Home wiring

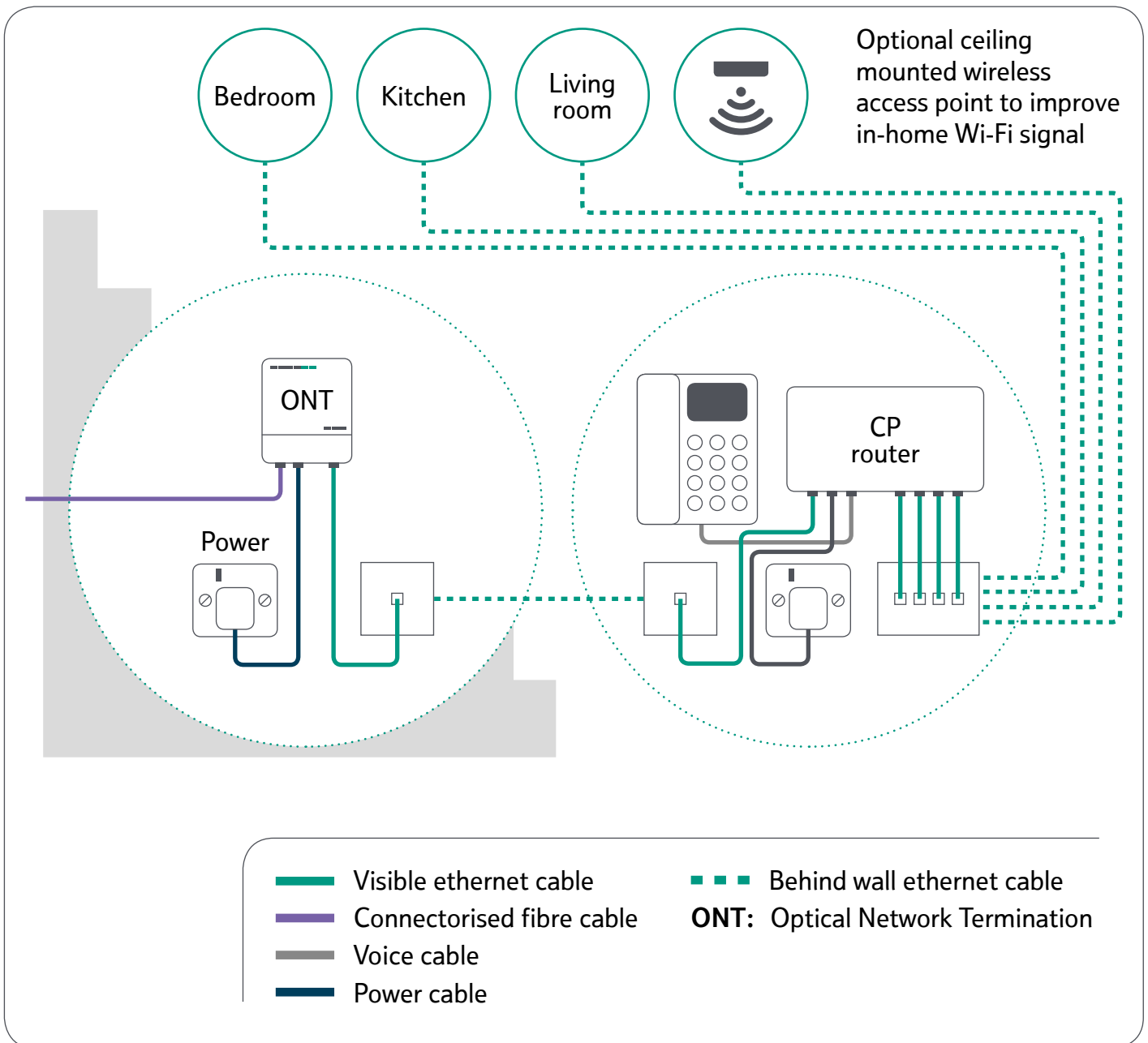


Option 1: The simple install

The simplest installation will be the provision of the Openreach equipment (i.e. the ONT will be positioned adjacent to the outside wall) to which the customer then attaches the router, provided by their communications provider.

This installation limits the number of physical connections to the router and means the homeowner may not make the most of their FTTP connection due to the reliance on wireless connectivity.

Home wiring

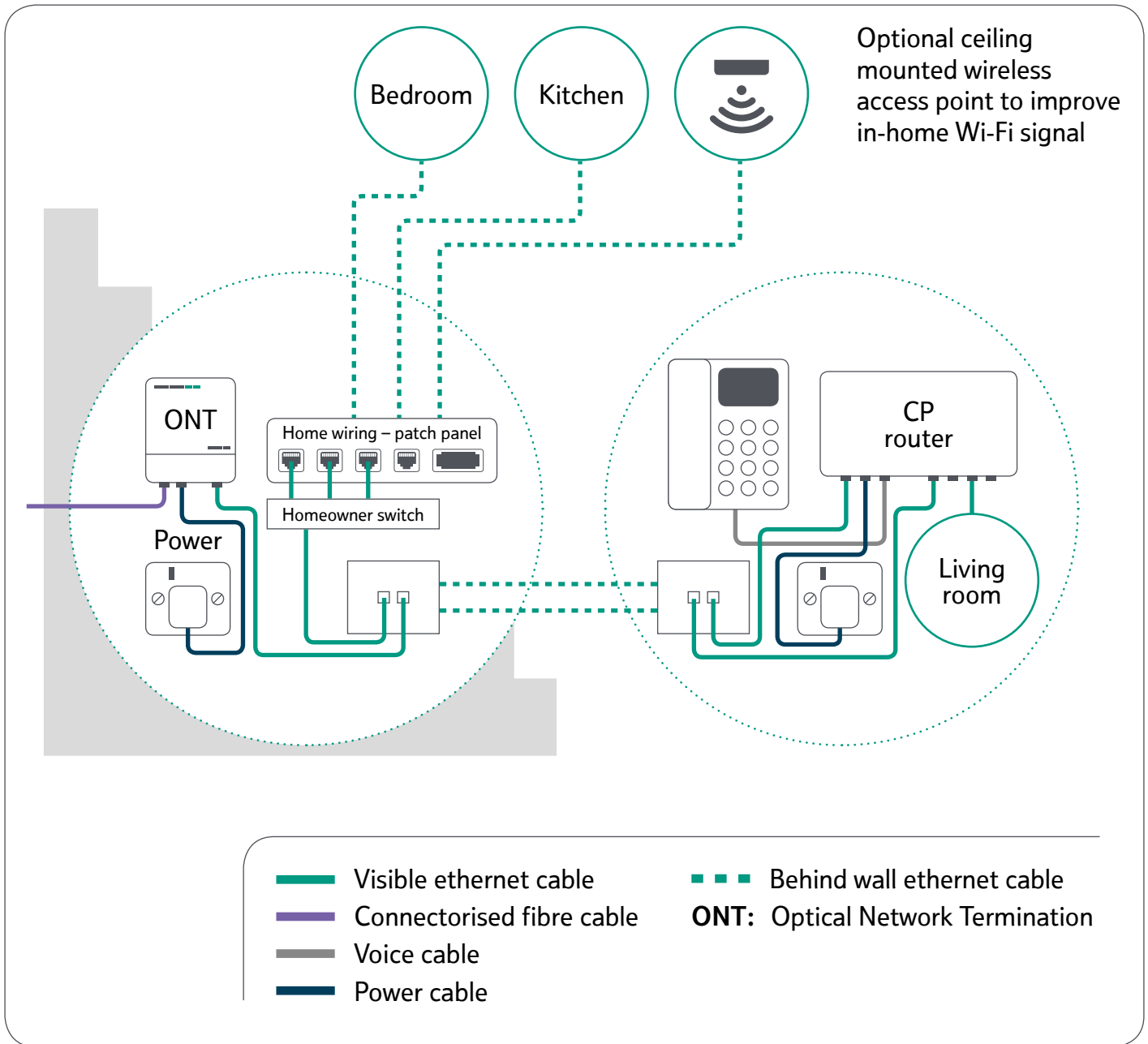


Option 2: Relocating the router via internal network cabling

Relocating the communication provider (CP) router provides a better quality wireless connection, as well as the ability to connect static devices such as TVs or games consoles physically. This allows these devices to take full advantage of the high speeds and bandwidth of a full fibre connection. Additional Cat6* cabling is required for this option from the ONT to the chosen relocation area. This connection should terminate in an RJ45 socket. A power socket should be provided for the CP router next to this socket.

*Cat6 is the preferred option to 'future proof' for modern devices

Home wiring



Option 3: The networked home

Further to the second option, this setup cables back from the CP router position within the property to the under stairs/service cupboard position of the Openreach ONT for the location of a patch panel. This means that, as much as possible, any structured cabling is discreetly located out of sight.

A patch panel is the best option to intelligently connect multiple rooms with structured cabling. In this setup a customer could also install an ethernet bridge/switch to further create a truly networked home.

Home wiring

Provision of the Openreach equipment

When Openreach install the equipment we will install the ONT wherever the incoming fibre cable is located. Where you self-install the ONT, you will have control over when the equipment is installed. The ONT will remain the property of Openreach in both installation scenarios.

Where you are self-installing the Openreach equipment we will supply the ONT and the connectorised internal fibre cable you need. If you are installing the ONT opposite the cable entry hole, you will need to install a flush mounted double back box on the internal wall where the ONT is to be located.

The ONT will be installed at this location unless an alternative position has been agreed with your FBC and the appropriate connectorised internal fibre cable run in a continuous fault-free length to the alternative position.

While the provision of internal wiring beyond the Openreach ONT is the responsibility of the developer, you can contract an Openreach engineer to do this work for you. If interested, please contact your local customer network solutions team on 0800 783 2023. Terms and Conditions for the provision of internal wiring will apply.

Please note

If connectorised cable is damaged by developers during installation then an internal Splice Point may be required to be fitted to complete installation. This will be undertaken at commissioning stage by Openreach.

Installation of internal cabling

Voice Cabling

- Voice extension cabling shall run direct from the ONT voice port. Connection to the ONT is made via a BS6312 431A Plug inserted into voice port 1. This socket must be a slave socket, not a master socket.
- Extension sockets shall be located close to power sockets for easy equipment connection. A minimum of 50mm between telephone cables and power cables must be left throughout.
- Where this isn't practical, telephone and power cables must be separated by an acceptable divider (i.e. of rigid, non-conducting material).
- Extension wiring must be telephone/data grade and have plain annealed solid copper conductors of a diameter between 0.5mm and 0.63mm. The conductors must be in twisted pair format. The conductor resistance shall be of a maximum of 96 ohms/km. The cable sheath must be PVC.

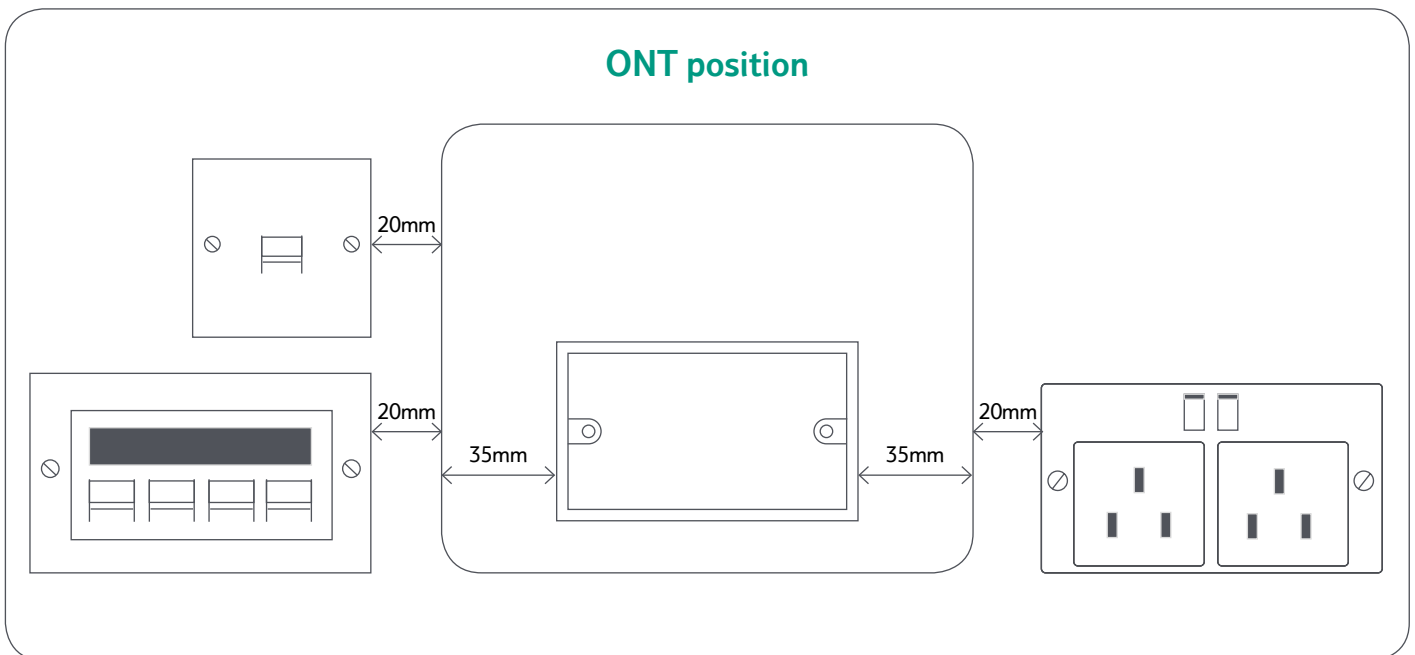
Data Cabling

- As a rule of thumb connectorised internal fibre cables must not exceed the minimum bend radius (i.e. no smaller than) of a £2 coin.
- Detailed information on cable installation and separation is given in the British Standards.
- Code of Practice 6701, Part 1 (particularly clause 6) and the relevant sections of the latest IEE Regulations for electrical Installation (Regulation 525 is of particular importance).
- The wiring pattern for cabling must be either in series or spur. For data it must be point to point as speeds will be impacted after the first point of a daisy chain.
- We'd recommend data cabling rooms likely to benefit most from a physical connection, like the room with the main TV and the home office.

3 Developer self-install

Internal Work at defined ONT and Communications Provider router position

- Fit the double electrical socket to the wall.
- Fit the double back box to the wall.
- Fit the slave voice socket to the wall (can be modular to house one voice port and one data port).
- Fit RJ45 modular boxes. The number of these are to be determined by you the developer Openreach recommend a minimum of two are fitted, one for the communications provider router and the other to the room requiring streaming media for example for streaming high definition TV. See the internal wiring section for further information.
- All internal wiring to be run back to this point (daisy chain for voice and point to point for data).
- See below for the recommended layout of sockets on the wall, the layout can be mirrored.



Single Dwelling Unit at second fix (Internal Work)

- Fit the enclosure to the wall over the double back box using the supplied template.
- Take the pre-connectorised cable from back box to the ONT position.
- Clean both the pre-connectorised cable and the optical port of the ONT before inserting the cable.

A video showing the installation of the internal equipment can be found on the Openreach developer website at the following link:

www.ournetwork.openreach.co.uk/property-developers/developer-handbooks-and-extra-services.aspx

Developer self-install



Remove the cap from the green fibre connector and use the One Click cleaner to clean both the connector and the optical port on the ONT. Once cleaned plug into the Optical port on the ONT. Care must be taken at this stage not to contaminate the end of the fibre connector to avoid any dirt from inhibiting the data signal.

Please note

Fujikura are our chosen producer of fibre cleaners. The One Click cleaner shown here can be found at the following link:

www.fujikura.co.uk/products/fibre-and-optical-devices/connectivity-and-cleaning/one-click-cleaners/



Open the green flap on the Optical port and insert the fibre cable. The cable is designed to fit only one way, so ensure the raised nodule is facing the wall when inserting.

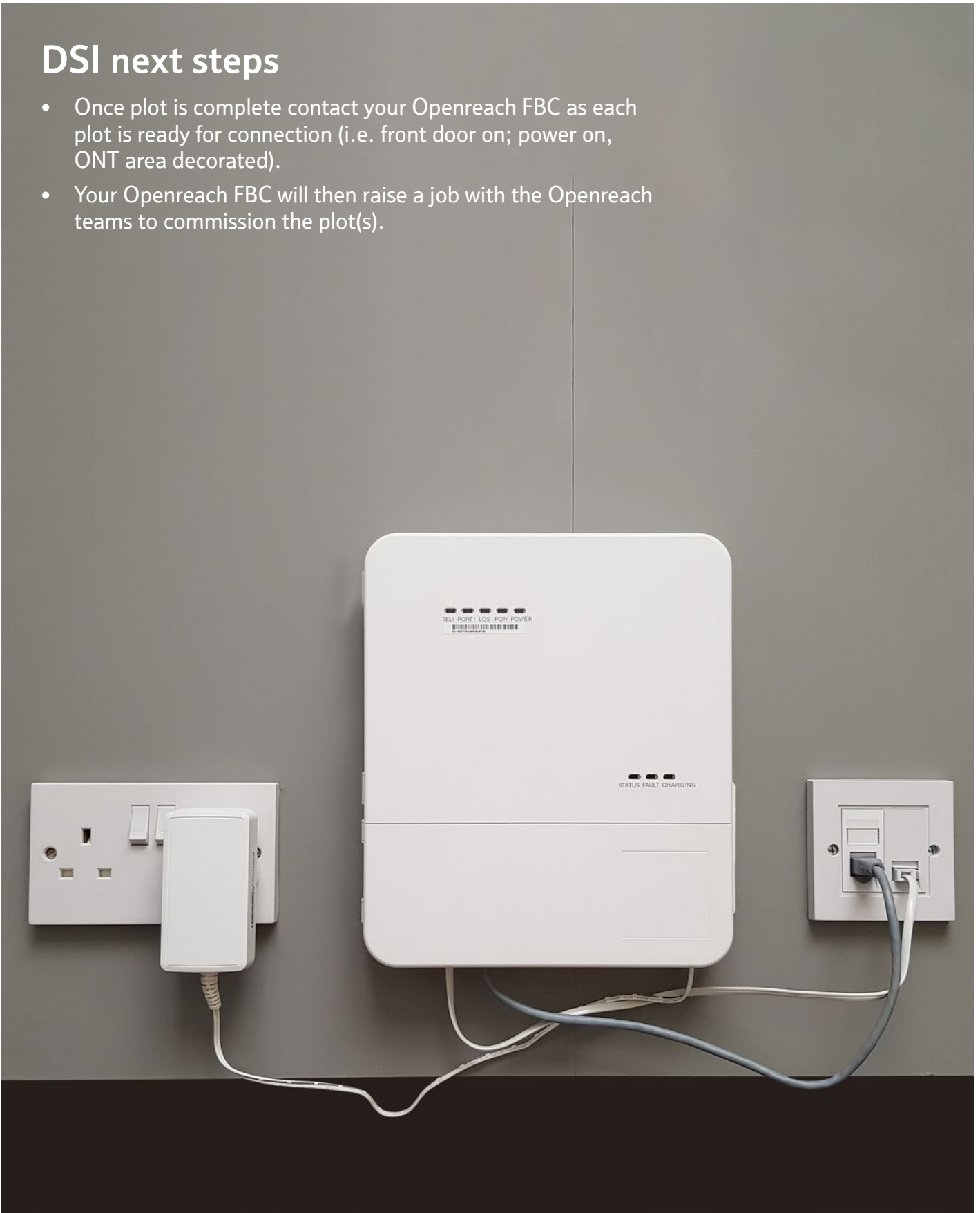
- Connect the ethernet cable to the PORT 1 port on the ONT. The other end of this cable will be connected to the CP router once ordered.
- Connect the telephone cable to the TEL 1 port on the ONT and plug into the Slave socket on the wall (this cable is a separate item and will be provided by your FBC).
- Connect the mains adaptor to the ONT and plug into the mains socket.
- You can see the final layout and cable connections here, ensure the cable lengths are correctly positioned within the enclosure before continuing.



Developer self-install

DSI next steps

- Once plot is complete contact your Openreach FBC as each plot is ready for connection (i.e. front door on; power on, ONT area decorated).
- Your Openreach FBC will then raise a job with the Openreach teams to commission the plot(s).



4 Cabling and ONT positioning

Single dwelling units

For Single Dwelling Units a pre-connectorised cable will be available in different lengths (2m, 5m, 10m, 20m and 30m) and will come in individual bags that can be ordered via the FBC. Enough cable must be left coiled or connector under capping/EF externally to connect to the connectorised cable coming from the duct.

Once the connectorised cable is installed then Openreach (or their third party) will visit to connect the cables from the plot back to the serving splitter location(s), mount the external capping and then commission the plot.

Installation of pre-connectorised cable at first fix (Internal Work)

Step 1

The dual connectorised cable should be installed externally to internally, as only the green SC-APC connector needs to go to the ONT mounting point. Feed the cable through the external wall to the mounting point. The bend radius of cable must meet all necessary installation requirements i.e. no 90 degree bends. Make sure to leave the protector cap on the connector until the Openreach installation is complete.

Step 2

Coil 1m of pre-connectorised cable into the empty double back box, taking care not to damage the green connector and fit a blanking plate to help protect the fibre. Ensure the caps on the end of the green connector are kept on during construction to avoid damage to the fibre cable. Coil the excess cable outside of the property ready for Openreach to connect. The amount of cable coiled should be the distance from the service hole to the ground + 0.5m. Ensure the black capping is kept on the external cable to avoid damage to the connectorised components.



Cabling and ONT positioning

Complying with Building regulations

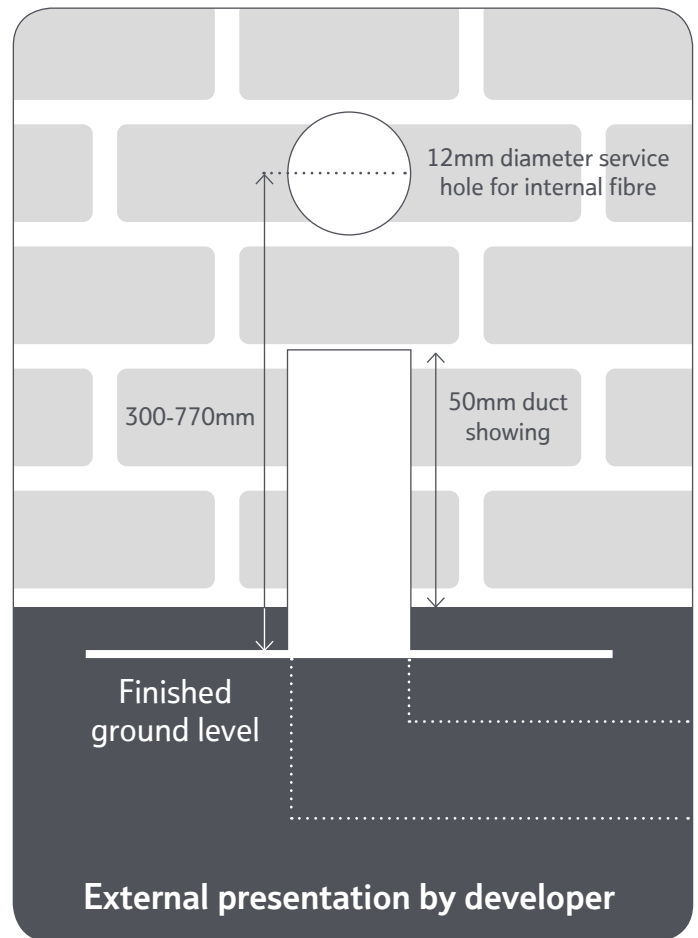
Even where you are not working with Openreach or another infrastructure company to provide a functioning broadband and phone infrastructure to the home the Part R regulations require the provision of duct in the default position discussed below so that infrastructure can be installed in the future.

ONT in the default position

When the ONT is to be fitted in the default position on an internal wall directly opposite the entry position of the service access hole adjacent to the external duct location, external capping will be fitted on completion.

To keep things tidy, make sure that the service access hole is drilled in line with the duct and in keeping with the dimensions shown below.

The service will be sealed with a grommet or mastic before fitting the external capping.



Please note

All internal wires and sockets beyond the Optical Network Terminal (ONT) are the responsibility of the developer/future home owner. Any faults or defects resulting in an Openreach visit may incur a charge.

Cabling and ONT positioning



Wherever possible, the duct shall be positioned on the opposite side of the wall to where the ONT will be installed, removing the need to run internal fibre cables. However, there are cases where the kit will need to be installed away from the external lead in and your FBC will be able to advise.

When Openreach is to install the Openreach ONT and connect the internal and external connectorised cables, two metres of cable is required at external end and 1m (or 2m for non-connectorised cable) at the internal point of the installation. It shall be left coiled and housed/ protected within a flush mounted double back box and faceplate ready for Openreach provision of ONT.

ONT installed inside the house (non-default position)

When the ONT is to be fitted in a non-default position i.e. not directly behind the external entry point, such as in a utility cupboard, the above guidelines must be followed to provide entry of the cable into the home.

What will be different is the length of cable that will run from the entry point into the building to the Openreach ONT. In this case you have the responsibility of running the connectorised internal fibre cable required inside the house in such a way that it is undamaged and complies with building regulations for the installation of telecommunications infrastructure cabling.

The same rules apply to the running of fibre cable internally that are specified in the section on exterior ducting. For example, the installation of the fibre cable in protective conduit and the absence of a bend more than 90°. Once installed the ONT must be kept powered on.

If this option is followed but the cable is found to be damaged once in situ, either during installation, damage sustained by construction work inside the property, or damage subsequent to the home owner occupying the property,

then unless you at your expense opt to replace the damaged fibre cable during commissioning of the property, Openreach will install the equipment in the default location within the home using surface mounted cables and charge accordingly.

The developer must run the connectorised internal fibre cable in a continuous length and it must remain free from any damage that could reduce the lifespan of the cable, and keep the capping on the connectorised cable until the installation is complete.

When Openreach is to install the Openreach ONT and connect the connectorised fibre cable, two metres of cable is required at external end of the installation and 1m internally. It must be left coiled and housed/protected within a flush mounted double back box and faceplate (or could be a brushed faceplate if preferred) ready for Openreach connection of external fibre cable and ONT nearby.

When the developer is installing the Openreach ONT 2m of cable is required at the external entry point and 1m at the ONT location.

Cabling and ONT positioning

Interconnecting voice lead (Item Code 077004) will be provided free of charge by Openreach. It provides connectivity from the ONT to a co-located voice socket/patch panel. On installation it becomes the property of the home owner. Alternatively, the developer may choose to hardwire directly into a voice socket using a 431A Plug.

Multiple Dwelling Unit (external)

- Fit all external duct from the site connection point to the building entry position.
- Fit all tray work from the building entry position to and up the risers to the internal splitter position(s).
- Run the fibre cable from the splitter or fibre node/budi location to (and in) the riser to the communications room.
- Coil a minimum of 2m in the communications room.
- Coil a minimum of 2m at internal splitter position.
- Ensuring bend radius of cable must meet all necessary installation requirements i.e. no 90 degree bends (as per current copper process).
- If there is a comms room it has to be within 2m at point of entry.
- If the risers are away from the point of entry but is fed through a vented car park then the external cable can be fed on tray work.
- If the risers are away from point of entry and is fed through a non-vented car park then an area needs to be allowed within 2m of point of entry to change from external to internal cable.

Multiple Dwelling Unit – Next Steps

- Once ductwork and cable has been run from communications room to Fibre DP contact FBC to gain confirmation that all cables are run correctly.
- FBC will then raise a job with the Openreach Internal teams to commission the splitter(s).
- Once commissioning is complete contact FBC as each plot is ready for connection (front door on power on, ONT location is decorated).
- FBC will then raise a job with the Openreach internal teams to commission the plot(s).

Ensuring fire safety with internal cabling

Once ductwork and cable has been run from communications room to splitter – contact FBC to gain confirmation that all cables are run correctly. FBC will then raise a job with the Openreach Internal teams to commission the splitter(s). Once commissioning is complete contact FBC as each plot is ready for connection (front door on power on, ONT location is decorated). FBC will then raise a job with the Openreach internal teams to commission the plot(s).

Fire stopping compartment penetrations

All holes drilled through floors and fire compartment walls must be fire proofed using correct materials to prevent the spread of smoke in the event of a fire. Openreach can provide these materials in either cartridge (similar to silicone sealant) or putty form.

Cabling and ONT positioning

Fixing cables securely

If you're running any cables through a fire protected area like a fire escape route, escape staircase or walkway, the cable must be adequately secured using non-combustible fixings.

Wiring regulations must be followed, ensuring that wiring systems in escape routes are supported in such a way that they will not be liable to premature collapse in the event of fire. This applies to all cabling and not just electrical cables e.g. alarm, telecoms and control wiring. From January 2019 this will apply throughout the installation as the 18th Edition wiring regulations come into force.

- Limit duct runs to a depth of 250mm on footway, 450mm on soft ground or 600mm if shared carriageway surface at house end.
- The Openreach duct must be no greater than 15mm from the finished wall surface.
- The duct must protrude no more 50mm from the finished ground level.
- A draw rope must be installed between the joint box and the duct at the property wall.
- The duct opening must be covered, preventing the ingress of debris.
- Ducting from property to the footway boxes must be laid 4-6 weeks before the plots are handed over.

Issues with home wiring

- Connectorised fibre cable too short, cut or damaged.
- Defective or damaged home wiring creating a fault on the line.
- Extension sockets not connected to Openreach ONT.
- Bending radii exceeded causing reduced levels of service due to fibre being broken or the bend was too tight.
- Incorrect cable type or wiring configuration.

Impact on delivery

- Inability for Openreach to provide service and developer requirement to re-provide connectorised fibre cable.
- Poor user experience for home purchaser with possibility of Openreach charges if called upon to rectify.
- Slower data download speeds experienced.

Impact on delivery of issues

- Delay in completion – Openreach may refuse to cable if we can't guarantee adequate protection.
- The capping and covers would look unsightly.
- Failure to provide conduit can prevent a cable from being installed.
- Customers may not be able to place orders and remedial work may incur additional costs.

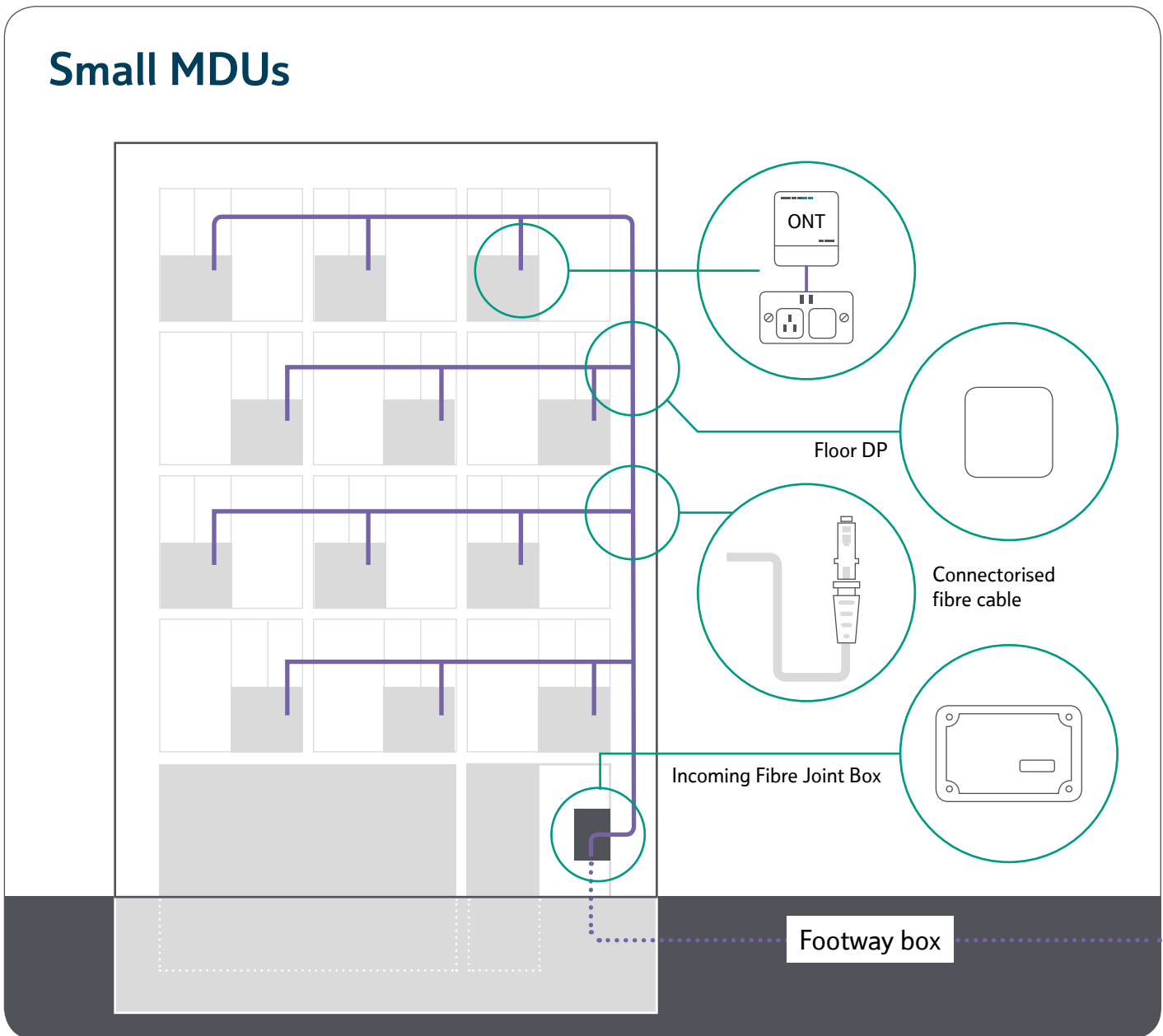
Typical issues with duct presentation

- Duct not cut to the appropriate height from the finished ground level.
- Duct installed too shallow.
- Duct protruding too far from the finished wall surface.
- Duct not lining up with internal fibre cable lead in.

5 Multi Dwelling Units (MDUs)

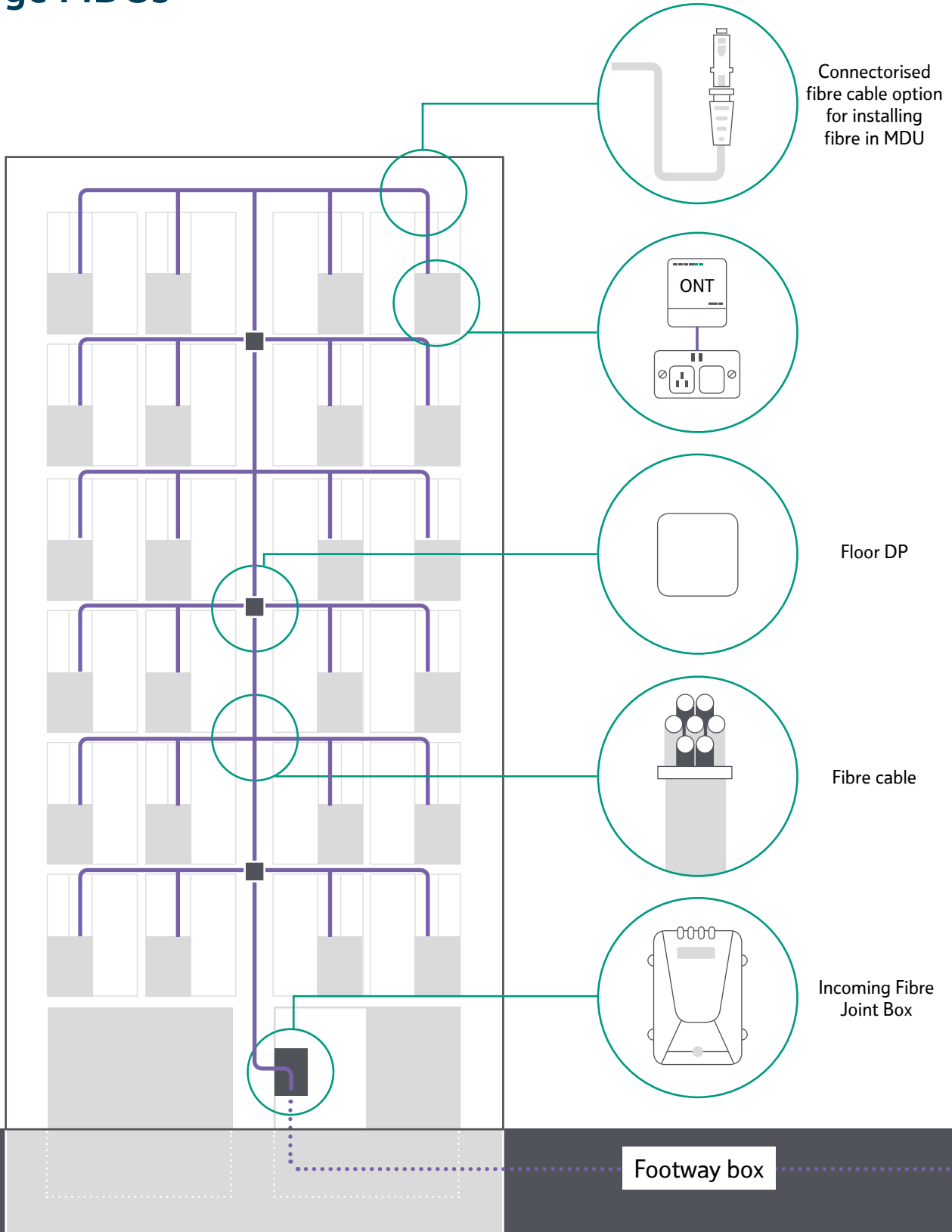
Openreach will create a fibre layout based on your Mechanical & Electrical (M&E) drawings (on larger MDUs) of the MDU. The design will calculate the stores required to build the network. Your FBC is on hand to guide you through the ordering process to make sure the equipment is available when you need it. The incoming Duct 54 and fibre cable will terminate in the communications intake room or riser cupboard. This needs to be a secure and safe location with access for installation and any future maintenance visits.

Our fibre box/splitter needs to be installed at a minimum height of 200mm and a maximum of 1500mm. Your FBC will agree the location with you. Connectorised internal fibre cable needs to be run from each plot to the fibre DP location or basement box, depending on MDU layout. A minimum of 3m of coiled cable needs to be left at the fibre DP, with 1m left at the plot end. A wayleave may be required from the building owner prior to installing apparatus in common areas. Remember you may need to order copper, for example: for lift lines.



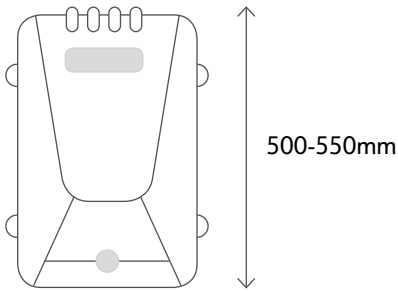
Multi Dwelling Units (MDUs)

Large MDUs

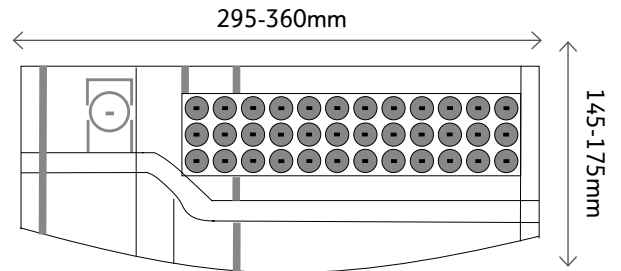


Multi Dwelling Units (MDUs)

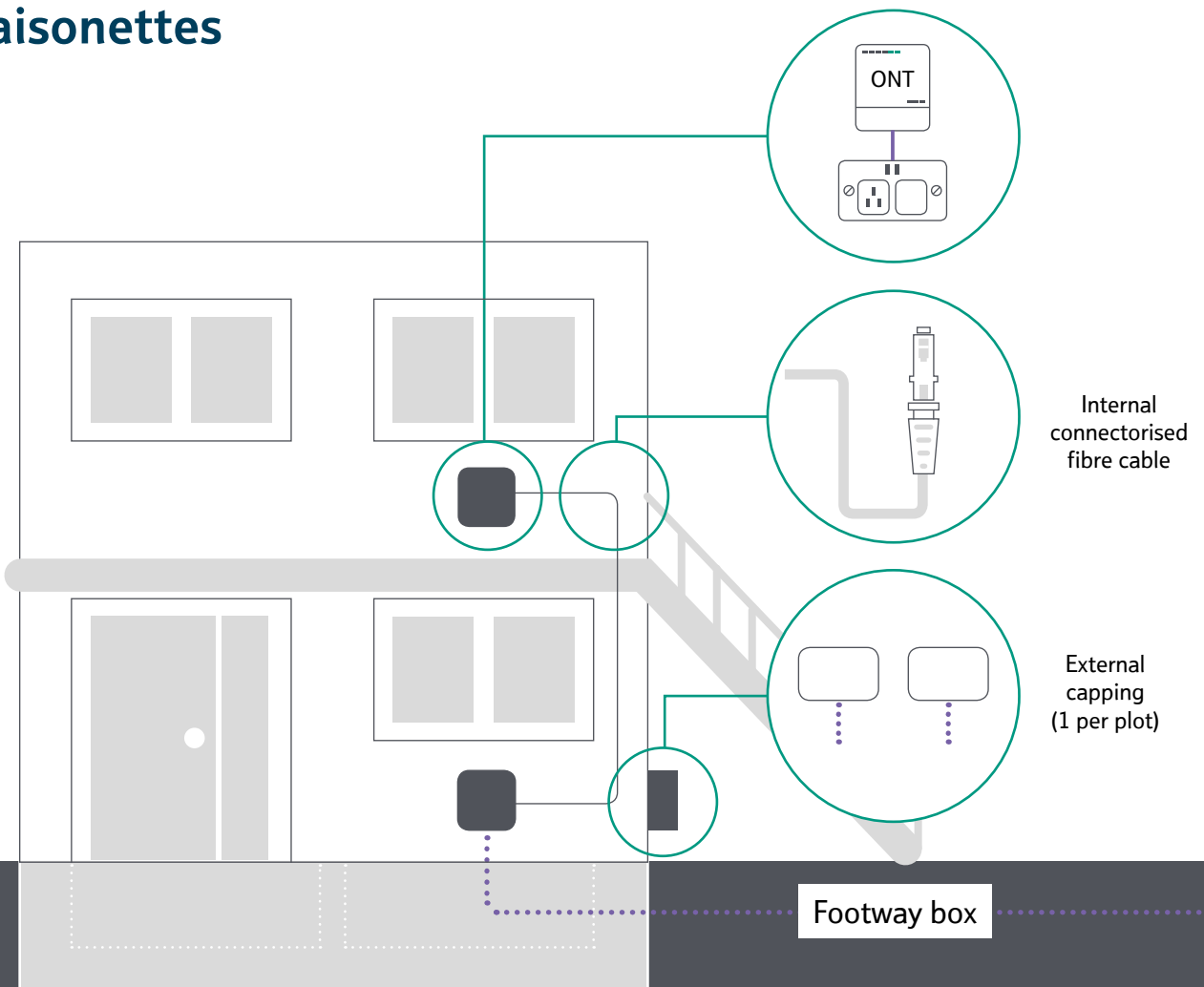
For larger MDUs there may be a requirement to install multiple fibre boxes splitters.



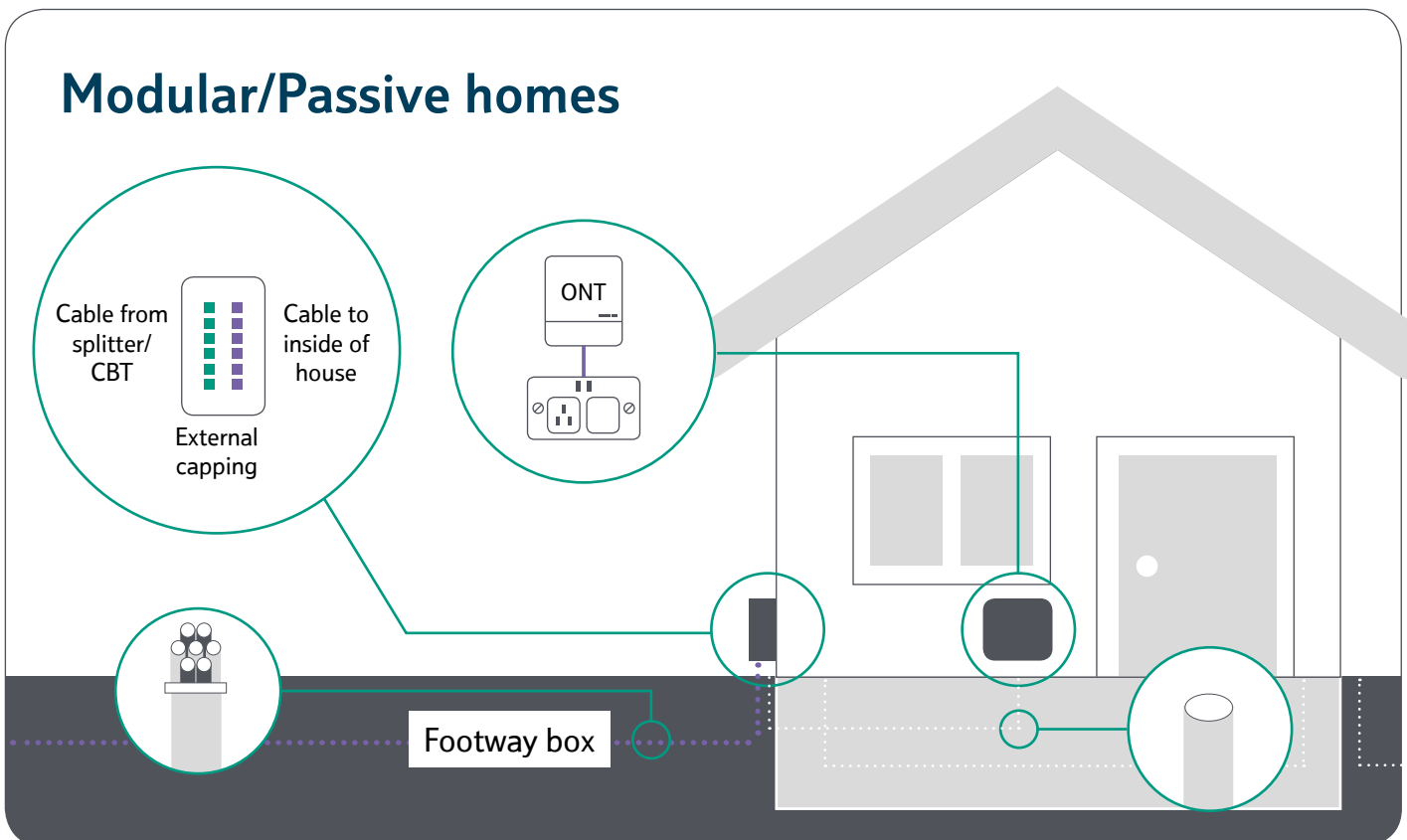
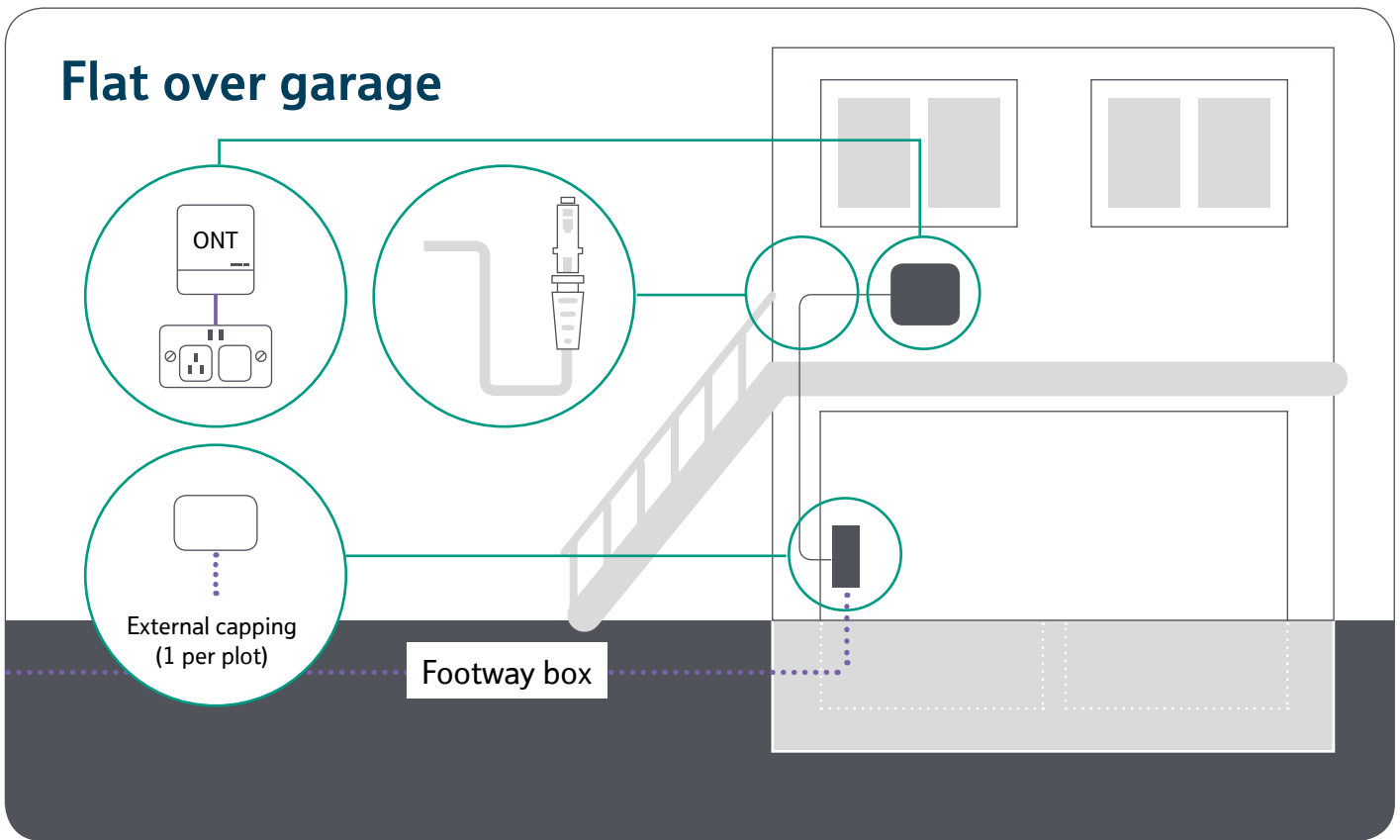
These boxes/splitters will be connected with Duct 54 and fibre cable commonly housed within the riser space.



Maisonettes



Multi Dwelling Units (MDUs)



Multi Dwelling Units (MDUs)

Option where Openreach installs the equipment

When Openreach is to install the ONT, 3m of cable is required at the splitter/ floor DP location and 1m (2m if non-connectorised cable) at the ONT end of the installation.

Each apartment will require a designated connectorised internal fibre cable run in a continuous fault-free condition from the designated ONT location within the apartment to the floor DP within the riser.

At the splitter locations the cable should be clearly marked with the apartment number and left safely coiled within the riser.

- Install a flush mounted double back box at the desired ONT location.
- Install the connectorised fibre cable from this point to the designated riser termination point.
- Ensure there is 1m of spare connectorised fibre cable protruding from the back box.
- Push some of the spare cable back into the wall void and coil the remainder inside the back box, taking care not to damage the connectorised end.
- Install blanking plate or brushed face plate to protect cable ready for provision of ONT nearby.

Bends in fibre cable must be kept to a minimum and the installation of trunking, cable trays/grids shall not compromise the bending radii.

Fibre cable containing no metal parts can be run on shared trays.

Plate cable fixings with cable ties must be used to fix fibre cable direct to walls to avoid it being damaged.

Under no circumstances should cable or tubing be secured or supported to the suspended ceiling hangers or under floor support legs.

It is the developer's responsibility to provide fire stopping on completion of the cable/ tubing installation.

Openreach networks must not interfere with or be interfered with by other services within the riser or any other shared space. e.g.

- Un-insulated hot water pipes.
- Unscreened mains cables.
- Fluorescent lighting.
- Heavy duty switch gear.

A wayleave may be required from the building owner prior to installing apparatus in common areas. Remember you may need to order copper lines for commercial properties, for example lift lines.

Your FBC will advise of all cable marking/ labelling and will check for this when 'calling off' the work.

IET wiring regulations shall be followed.

External cables can run to a maximum of 2m from the internal building entry point.

From this point onwards, all cables must meet current fire regulations. The alternative is to house all cables in metallic trunking.

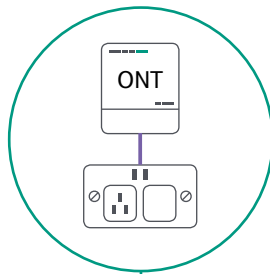
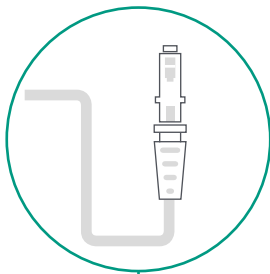
Internal fibre cable must not be bent beyond its minimum radius. If it has been damaged or there is evidence of kinking it shall be discarded. Your FBC will advise on replacement of the cable.

Care shall be taken to avoid stretching cable/ tubes through installation. If cables are damaged this way you will be required to replace them.

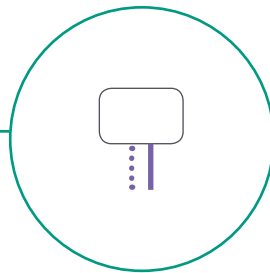
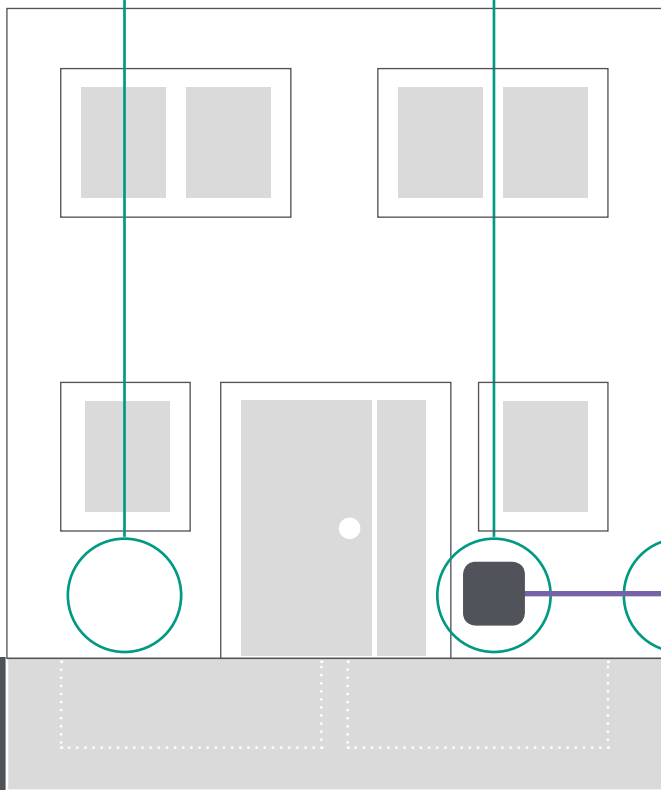
6 Commercial units

Small or Medium Enterprise (SME) unit on a residential development

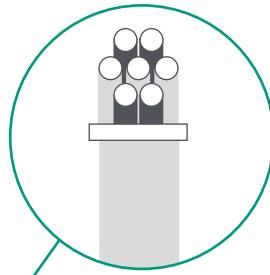
Internal connectorised fibre cable



Please note
The ONT position within the building is to be agreed between the FBC and the developer on site.



External capping

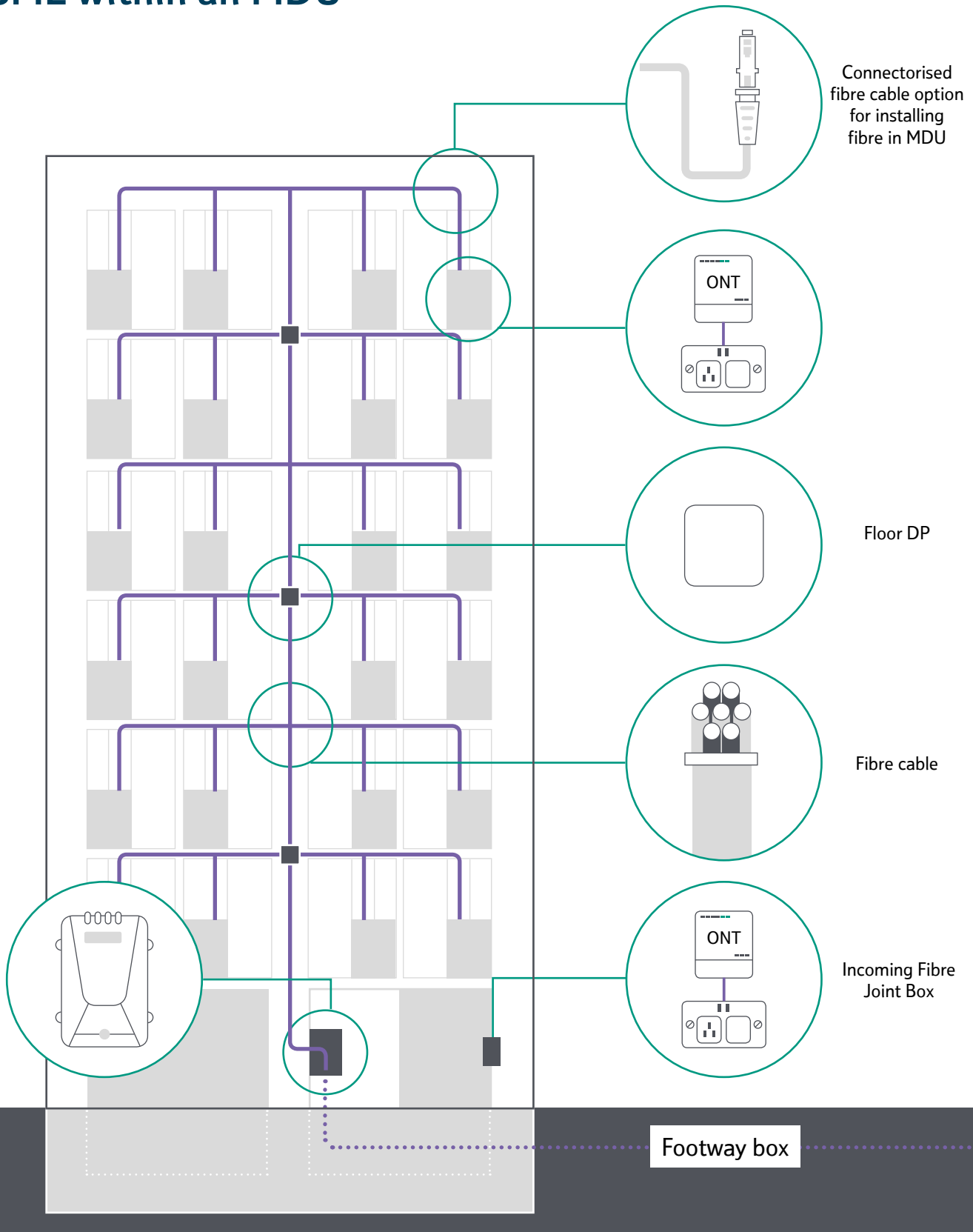


External fibre cable

Footway box

Commercial units

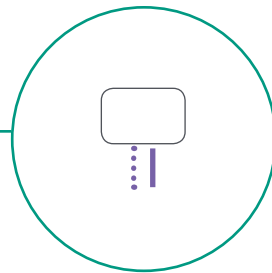
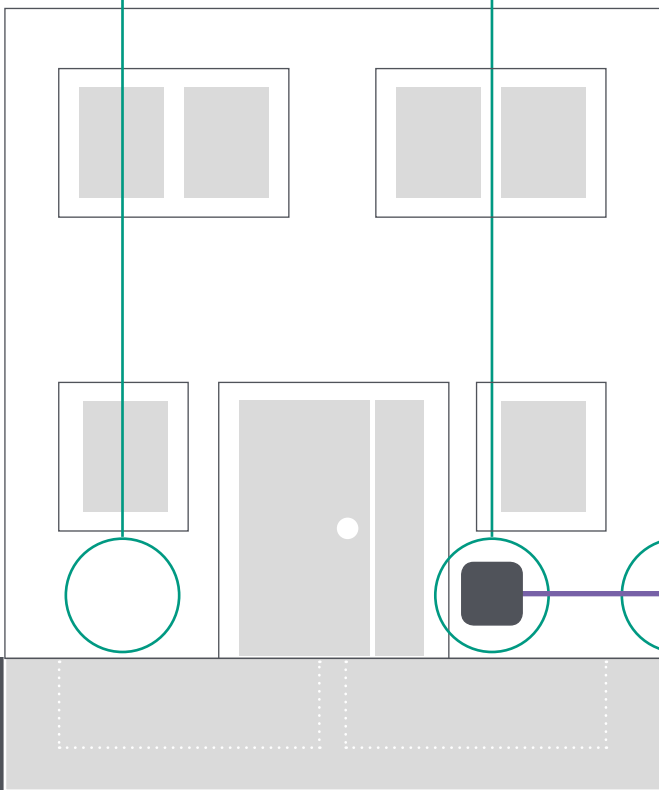
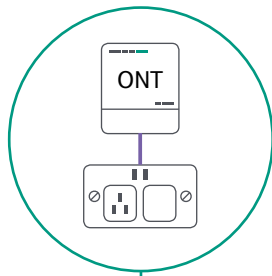
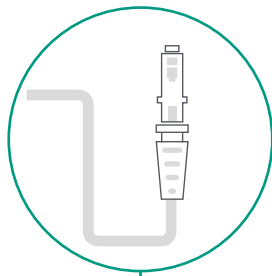
SME within an MDU



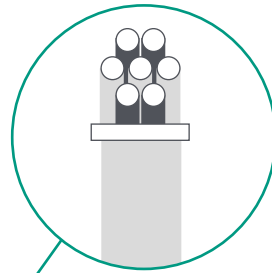
Commercial units

Commercial unit within a commercial only site

Internal connectorised fibre cable



External capping



External fibre cable

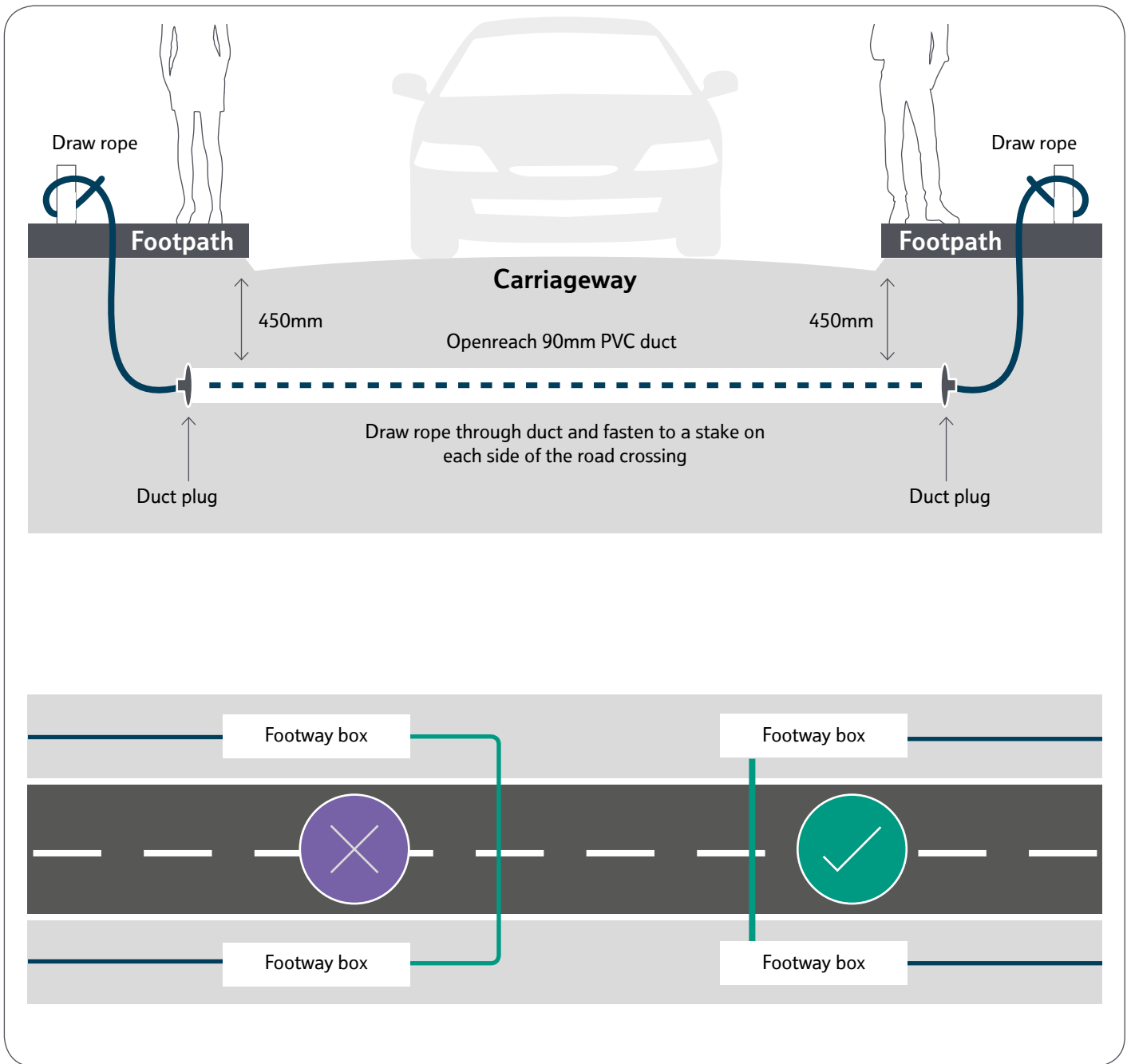
Footway box

7 Duct laying

Carriageway Road Crossings

Where our duct crosses a carriageway, adjoining kerbs must be temporarily marked to note positions. Openreach duct must be laid on an outer edge of the service trench to enable box building. A draw rope will be inserted through the duct and secured to the marker posts at both ends of the crossing. The appropriate Plug Duct 4B socket end and 4C Spigot is then fitted.

Duct laid beneath a carriageway crossing must be a minimum of 450mm depth from the cover of the final surface levels and, for engineering reasons (Streetworks UK), separated from other services laid in parallel by 600mm (to permit us to install underground joint boxes without the need for bends).



Duct laying

Ducting to the building

Duct to the premises/building must be laid at a minimum depth of 250mm and be as straight as possible.

Ducting general principles

- All runs shall be laid as straight as possible. If needed, you can carefully bend the ducts or use pre-formed bends supplied by Openreach.
- There shall be no more than one pre-formed 90° bend in any single run of duct.
- Pre-formed 90° bends shall not be installed in any duct linking two joint boxes.
- Footpath or service strip ducting must be laid at a minimum of 250mm depth of cover.
- All space alongside the duct must be backfilled with granular fill to a minimum thickness of 75mm.
- For all Single Dwelling Units (SDU) duct must be terminated on the external surface of the property.
- The duct termination point must be in a location that will allow unrestricted access for any future maintenance activity.
- All ducts must be provided with a draw rope after installation, unless it's agreed locally to substitute the draw rope with a cable.
- Please notify your FBC when the duct has been laid and is ready for inspection.

Commercial unit ducting

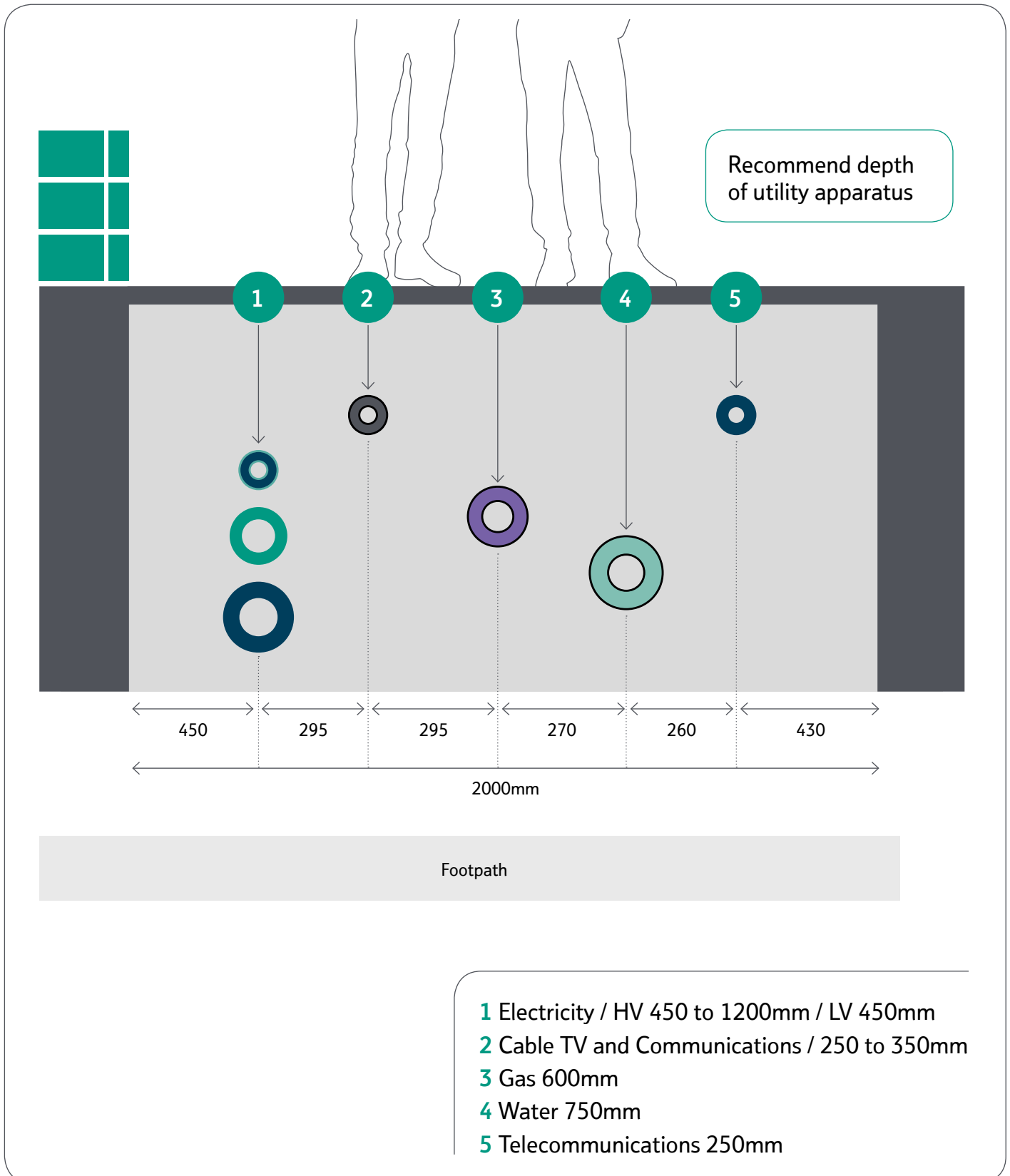
- 90mm duct can be laid either externally or internally to the building, with 45 degree angled bend.
- If internally then the duct should be sealed once cabling is complete – the FBC will provide this as a stores item.
- The termination point on a large commercial unit within a commercial only site should be located within 10m of the entry point.

Please note

The latest information on the positioning of utilities, mains and plant can be obtained from Streetworks UK: [streetworks.org.uk](https://www.streetworks.org.uk)

Duct laying

Arrangement of mains services



Duct laying

Avoiding damage to the Openreach underground network

Openreach has an extensive underground network that can be located inside / on the perimeter of a site.

This network is vulnerable to excavation related damage unless appropriate precautions are taken.

The precautions for avoiding damage to an underground utility plant are contained within the Health & Safety Guide no. 47: “Avoiding danger from underground services”.

This document stresses the need for the availability of utility plans on site and the use of safe digging practices.

Available here: www.hse.gov.uk/pubns/books/hsg47.htm

Damage to the Openreach network by a third party can be expensive for that party to repair.

By working together, we want to make sure you avoid the repair and associated cost which can consist of one or more of the following:

- **Direct Cost** – the cost of repair.
- **Operational Cost** – delays associated with repair.
- **Social Cost** – loss of service to emergency services/ centres or the vulnerable in society.

Typical issues with carriageway road crossings

- Insufficient depth.
- Proximity to other services.

Impact of issues

You will have to renew duct and this may delay any first occupation date or subsequent occupation dates.

Click Before You Dig

To obtain a more precise location of Openreach infrastructure (either within your site or the adjoining land) and avoid costly damage, contact:

email: cbyd@openreach.co.uk

Utilisation of the Openreach “Click Before You Dig” free service has a proven record of minimising the potential for damage and cost.

If you need to move or consult on existing Openreach equipment, contact us on **0800 783 2023** or complete the online webform at **www.ournetwork.openreach.co.uk/help-and-support.aspx**

8 Modular jointing chambers – Quadbox™

The optional approved pre-formed chamber system Quadbox™ can be used to speed up the installation process and bring significant productivity benefits as there is no need for specialist box building teams and concrete backfill to be used.

The Quadbox™ is not a free stores item from Openreach, but can be purchased directly from our approved supplier, Cubis Industries: www.stakkabox-quad.com

Joint box modular footways 104 and 106 are the Openreach approved versions (BT specification LN712).

Box furniture items slot into moulded pockets within the chamber, eliminating the need to cast-in fixings or drill on site. Duct entries are also easy to achieve, using a standard hole saw mounted on a cordless drill.

The lightweight high-strength system is supplied as 150mm deep twin wall high-density polyethylene (HDPE) rings to provide maximum flexibility and strength which are simply stacked on a prepared base and backfilled with suitable as-dug or Type 1 material.

See the suppliers Installation Guide Which comes with your box.

If purchasing a pre-formed chamber you are required to purchase the associated furniture.



Modular jointing chambers – Quadbox™

Furniture

Cable brackets and steps (where required) are supplied in a bagged kit and easily slot into purpose designed pockets in the chamber. The brackets and steps drop into preformed slots.



Available Size Range

| Product Code | Clear opening | Depth Per Section |
|--------------|---------------|-------------------|
| JMF104 | 915X445mm | 150mm |
| JMF106 | 1310X610mm | 150mm |

Duct entries

Duct entries can be cut as and where required using a hole saw mounted on a cordless drill.

The chambers incorporate guides which identify drilling points to ensure correct duct spacing.

A maximum of 4 duct entries can be made into a single wall of the Quadbox™.



Quadbox points of note

As with brick built chambers, care should be taken to make sure:

- The box is set at the correct depth and the base/ plinth is installed correctly.
- The side wall is not damaged/misshapen due to over compaction.
- The frame is level with the surface and a core drill is used for cutting duct entries.
- The developer is required to purchase the required wall bearers.

9

Joint boxes, footways and frames & covers

Footway (JBF104/106)

Joint box designs and specifications may vary depending on the duct layout and whether multi-way ducts or major road crossings need to be incorporated into the network design.

Full technical drawings and specifications are available at www.openreach.co.uk/propertydevelopments

Materials

- **Bricks:** BS EN771-1. Stretcher Bond.
- **Cement:** BS EN197-1:2000 ordinary mix. Three parts sand to one part cement.

Specifications

- **Base:** 150mm concrete, clean and level.
- **Brickwork:** Keyed in at the corners and pointed.
- **Frame and cover:** Set on a mortar bed and fitted squarely to the box structure. You can purchase lifting keys for the covers from TW Engineering Co Ltd at www.twtools.co.uk (tel: 0115 932 3223).
- **Duct entries:** Must not enter through corners and be no less than 75mm from the side wall. They shall enter wall at a minimum depth of 250mm from the top of the frame, cut flush and clear the base by a minimum of 100mm.
- **Bolts:** Must be fitted in each box to allow ironwork to be installed by the developer.
- **Step(s):** One step is required in all boxes deeper than 700mm.
- **JBF104(C):** 915mm(L) x 445mm(W) x 750mm(D).
- **JBF104(D):** 915mm(L) x 445mm(W) x 900mm(D) the minimum depth for boxes either side of road crossings.
- **JBF106(C):** 1310mm(L) x 610(W) x 750(D).

- **JBF106(D):** 1310mm(L) x 610(W) x 900(D) the minimum depth for boxes either side of road crossings.
- **All backfill material** to be class 6N type.
- **Workmanship, materials and method of construction** are to comply with all current relevant contract documents, British Standards and codes of practice for the construction industry.
- **Concrete** to be grade C32/40 with a water cement ratio 0.4 minimum. Cement content 380kg/m³. Aggregate maximum size 20mm. All in accordance with BS8500.
- **All ducts** shown are based on maximum recommended values for Duct Type 54D.
- **End ducts** to be inline.
- **Ducts** to be positioned not less than 75mm from a side wall.
- **Mesh** to be grade B500B or B500C conforming to BS4483.
- **Short lengths of Duct 54D 90mm** to be used on non-ducted routes. Appropriate duct to be used on ducted routes.
- Where instructed to do so drill one set of three holes using a 12mm **masonry drill** bit to a depth of 80mm for future fitting of equipment mounting bracket.
- For details and specs on using corbelling visit the [link](#) at the top of this page.

Please note

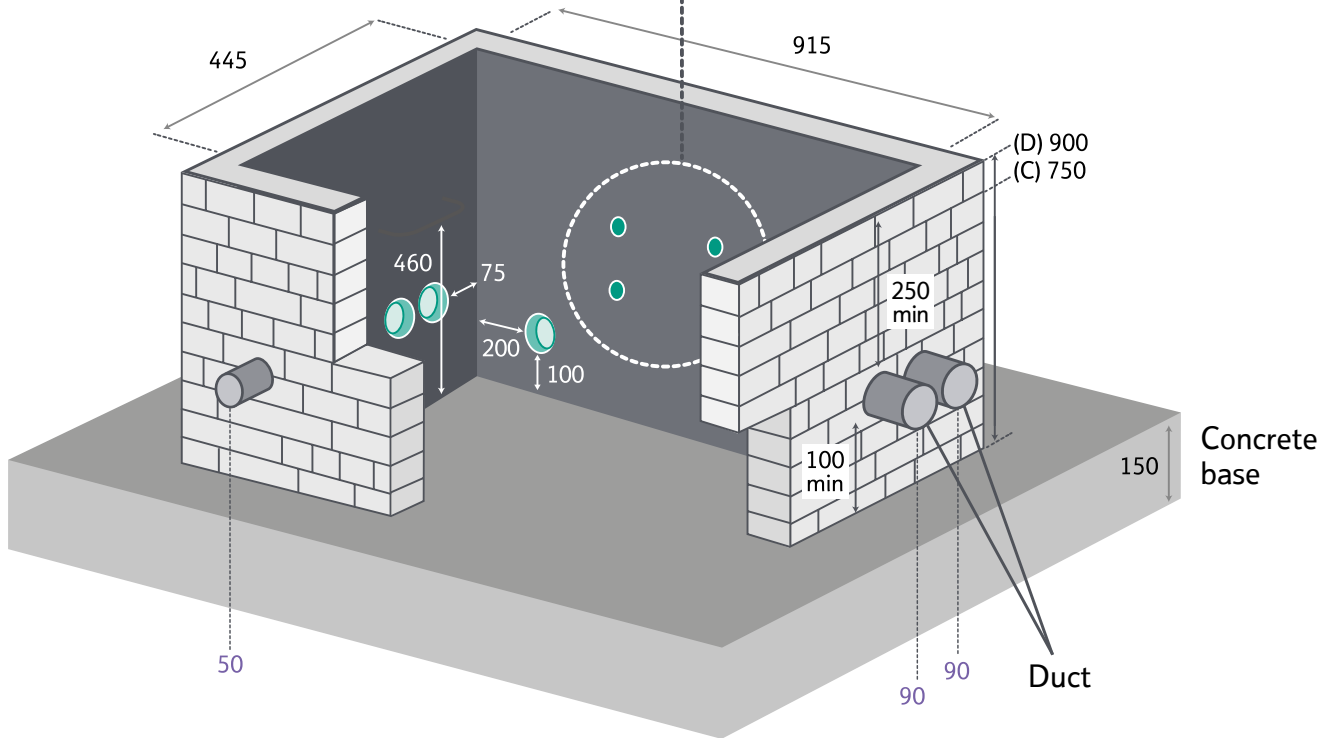
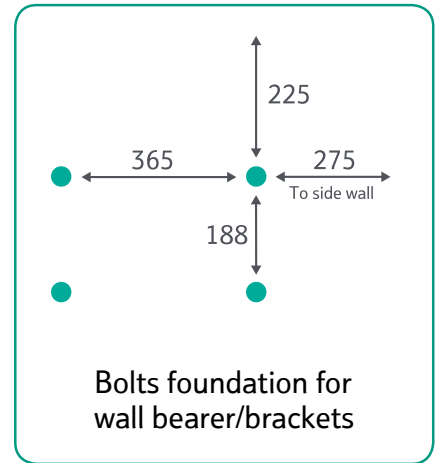
At no time must minimum box depth be compromised. Consult your FBC if the minimum depth cannot be achieved.

Joint boxes, footways and frames & covers

Joint box footway 104 – the preferred option

Internal dimensions. Brickwork Stretcher Bond.

Dimensions in mm (not to scale).



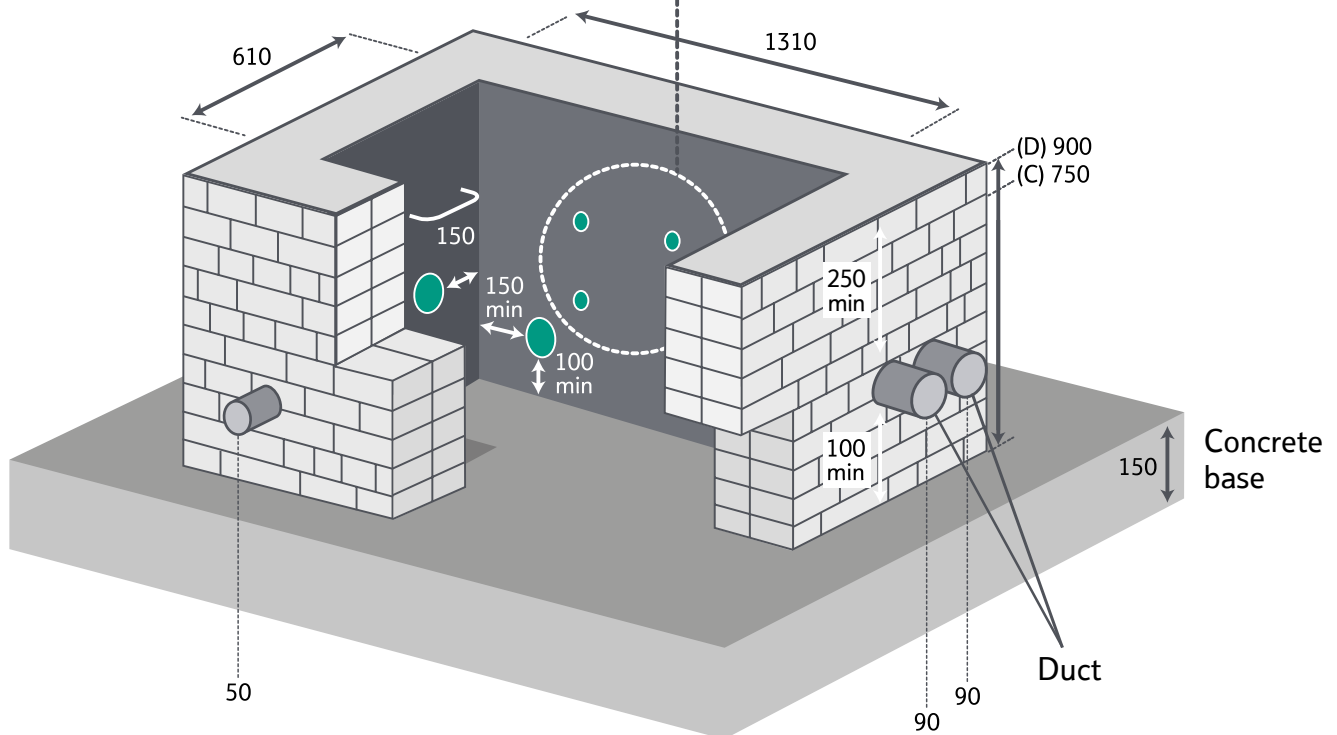
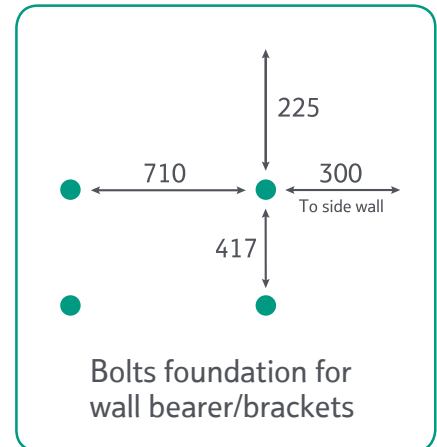
Joint boxes, footways and frames & covers

Joint box footway 106

Internal dimensions. Brickwork Stretcher Bond.

Dimensions in mm (not to scale).

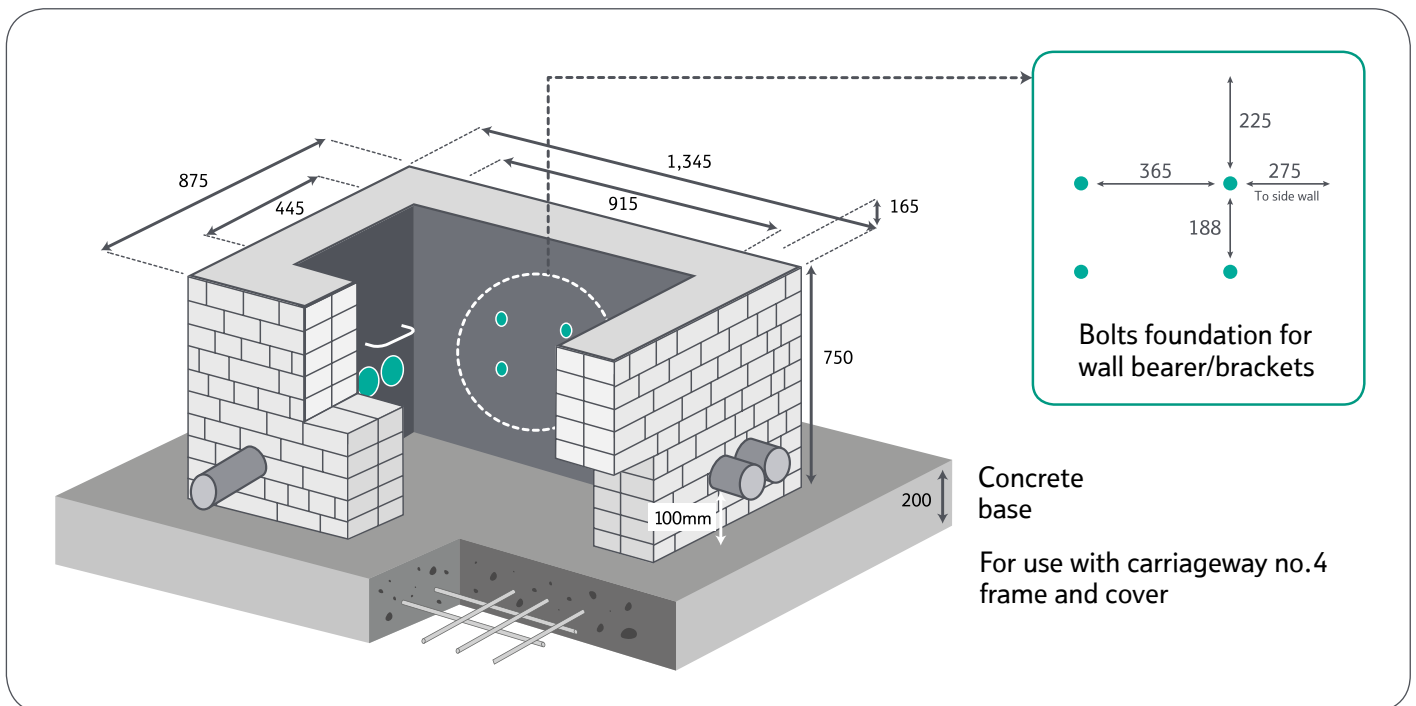
- Minimum depth for road crossing 450mm
- Sump to be fitted in boxes deeper than 700mm



Joint boxes, footways and frames & covers

Carriageway JBC4

Box design and specifications may vary. This will be determined by the duct lay-out and whether multi-way ducts or major road crossings need to be incorporated into the design.



Materials

- **Bricks:** BS EN771-1. English Bond.
- **Cement:** BS12 Portland Cement.
- **Concrete:** BS EN206 Grade 32/40 concrete.
- **Mortar:** BS5628, Part1 requirement for mortar Table 1, Type (i).

Base

- **Cement:** BS12 Portland Cement.
- **Concrete:** 200mm concrete Grade 32/40, reinforced with A393 grade mesh at 70mm cover.

Brickwork

- **Bricks:** BS EN771-1. English Bond.
- **All brickwork** to be keyed in at corners and pointed.
- **Brickwork** to be 'English Bond' constructed with a 10mm joint thickness of cement mortar.

Frame and cover

- **Frame and Cover Carriageway no.4** to be squarely set on a mortar bed Highway Agency standards HA104.

Lifting keys

- **Key Joint Box Lifter** should be used to lift the cover and can be purchased from TW Engineering Co Ltd at www.twtools.co.uk (tel: 0115 932 3223) or similar supplier of your choosing.

Duct entries

- Duct to be cut **flush** to the internal box wall.
- Duct **must not enter through corners** and be no less than 75mm from the side wall.
- Duct to enter wall no less than **450mm** from the top of the frame.
- Duct to be no less than **100mm** from the box base.

Joint boxes, footways and frames & covers

Frames and Covers

Cubis Industries is the only supplier of these Openreach approved products.

Only approved frames and covers shall be fitted on your site. They are identifiable by the following markings; 'EN24 B125' the British Standards kitemark the Manufacturer Mark (SID), the year of manufacture and the BT identifier.

The 'standard frames and covers' are supplied by Openreach. They consist of a galvanised steel fabricated frame, fitted with unfilled galvanised steel fabricated cover trays and cross-beams.

All covers can be fitted to brick or concrete.

Please note

Where there's evidence or high risk of vehicles using the soft verge e.g. as an undertaking area opposite a T-Junction, a passing point on a narrow road or a parking area, it will be necessary to install a 'carriageway chamber, frame and cover'. **There is also an optional 'recessed frame and cover'.**

Recessed frames and covers

These can be purchased by the installer as an option to the 'standard frame and cover'.

Each cover tray has two key-hole fittings (in the centre of the short side) one of which carries a BT identity mark and the manufacturers' three letter identification 'SID'. The other key-hole fitting displays EN124 and B125 together with the BSI Kite mark certifying the covers to BS EN124: 1994. Recessed frames and covers will accommodate infill blocks to a maximum depth of 60mm. If you're planning to install frames and covers that aren't supplied by Openreach e.g. for block paving, or you have any doubts about what frames and covers to use, please speak to your FBC.



Joint boxes, footways and frames & covers

Installation

All frames and covers shall be levelled to the final running surface.

Where a box is located within a grass, soft or unmade surfaces, the frame shall be surrounded with a 100mm wide strip of minimum grade C25/30 concrete, to the full depth of the frame, finished level with the top edge of the frame and the outside edge. It must be straight and parallel to the frame.

Unapproved frames and covers

Unapproved frames and covers must not be fitted. Openreach will take any necessary action against any developer who fits unapproved frames and covers within the network, including any potential claim for damages and costs, with possible delayed Service On Demand (SOD) payments. If you're unsure how to specify approved covers, please contact your FBC.



10 List of abbreviations and acronyms

Openreach maintains that all reasonable care and skill has been used in the compilation of this publication. However, Openreach shall not be under any liability for loss or damage (including consequential loss) whatsoever or howsoever arising as a result of the use of this publication by the reader, his servants, agents or any third party.

In the event of a discrepancy between the contents of this document and the contract, the terms and conditions shall take precedence. This is a living document and will be subject to update and change. The information within this document is provided for information purposes only. The Contract and Price List takes precedence.

| | |
|----------------|---|
| BBU | Battery Backup Unit |
| BSI | British Standards Institute |
| BT | British Telecommunications |
| CLI | Customer Lead In |
| CP | Communications Provider |
| DP | Distribution Point |
| FDP | Fibre Distribution Point |
| FTTP | Fibre to the Premises |
| FBC | Field Based Coordinator (formally New Site Representative) |
| HDPE | High-Density Polyethylene |
| IET | Institute of Engineering and Technology |
| JBC (N) | Joint Box Carriageway New Sites |
| JBF | Joint Box Footway |
| LSZH | Low Smoke Zero Halogen |
| MDU | Multiple Dwelling Unit |
| MJF | Product code designation for the Cubis Industries–StakkaBox/Quadbox |
| M&E | Mechanical & Electrical |
| NJUG | National Joint Utilities Group |
| NTE | Network Terminating Equipment |
| NTP | Network Terminating Point |
| ONT | Optical Network Termination |
| PAS | Publically Available Specification |
| PE | Polyethylene |
| PVC | Polyvinyl Chloride |
| RFH | Reduced Fire Hazard |
| SID | Manufacturers three letter identification |
| SDU | Single Dwelling Units |
| SOD | Service on Demand |
| UG | Under Ground |

11 Health and safety advice

This guidance is a practical aid for designers and site workers on what to eliminate, avoid and consider when working on the Openreach network on your site.

The advice is not exhaustive so speak to your Field Based Co-Ordinator (FBC) if you need further information.

Red lists

Hazardous procedures, products and processes that should be eliminated from the project where possible

Distribution point (DP) location

- Placing DPs into voids or other enclosed spaces with inadequate ventilation.
- Placing DPs adjacent to, or above, any fragile surface.
- Placing DPs directly above, or adjacent to, water features/ courses etc.
- Locating DP at greater than 1.5 meters above finished floor level (without fixed access system incorporated into design).

Power systems

- Ensure all power installation meet relevant standards, and where DC supplies are planned seek further advice about requirements for earthing of racks, power supply ratings etc. to take account of future needs and growth.

Cabling routes and lead-ins

- Routing of cables where the cables are above head height within false ceiling systems without a proper access system incorporated.
- Routing of cables external to building requiring specialist access methods (scaffold, mobile elevating work platform etc.)
- No internal ducting laid into Single Dwelling Units (SDUs).

Aerial and antenna transmission/ receiver systems

- Not mounted on building walls or other difficult to reach areas of a building.
- Design of roof mounted services that require access (for maintenance and so on), without provision for safe access (such as barriers) in particular access for aerials/ antennas systems.

Joint boxes, footways and frames & covers

Amber lists

Products, processes and procedures to be eliminated or reduced as far as possible and only specified or allowed if unavoidable. Including amber items would always lead to the provision of information to the principal contract or contractor where only one contractor has been appointed.

Distribution point (DP) location

- DP's located into voids or enclosed spaces provided with ventilation systems built in.

Aerial and antenna transmission/receiver systems

- EMF exclusion zones adequately managed with fixed barriers or partitioning systems.

Cabling routes and lead-ins

- Routing of cables where the cables are above head height within false ceiling systems.
- Routing of cables internally where access points require use of access equipment (ladders, step-ladders or platform steps) to allow for pulling in of cables.

Green lists

Products, processes and procedures to be positively encouraged.

- **Adequate access for vehicles** to minimise reversing requirements (one-way systems and turning radii) in particular if specialist vehicles will need access (pole erection units, MEWP vehicles etc.).
- **Provision of adequate access and headroom** for maintenance in communications rooms, and adequate provision for replacing heavy components.
- **Thoughtful location of mechanical and electrical equipment**, such as telecoms equipment, termination points, Wi-Fi transceivers etc. and so on to facilitate access, and placed away from crowded areas.
- **Lighting within communications rooms** adequate for fine tasks (fibre splicing, small diameter copper wire terminations etc.)
- **Provision of adequate air handling/conditioning and ventilation** for the installed equipment base within the communications room (and people having to access and work within the area).
- **Early installation of permanent** means of access, and prefabricated access systems with hand rails.
- **Provision of edge protection** at permanent works where there is a foreseeable risk of falls after handover (consider radio antenna or aerials installations on roof spaces).
- **Encourage the use of engineering controls** to minimise the use of personal protective equipment.

12 Quality control checklist

To help make sure your site network is built to a high quality standard, we've produced a checklist for each phase of the build.

Any subsequent changes to the site plan after a checklist has been completed must be communicated and agreed with your FBC as soon as possible.

Any re-work as a result of an out of date site plan could cause delivery delay and incur you costs in time related charges.

The Site Manager/ Developer Agent agrees to the quality standards and conditions.

Signature: _____

Date: _____

If you have any questions about your development, please visit www.openreach.co.uk/propertydevelopments or call us on 0800 783 2023

The site

| | |
|---------------------------------------|--|
| Developer | |
| Site Name | |
| Site Address | |
| Post Code | |
| Site Manager/ Developer Agent Name | |
| Telephone | |
| Email | |
| Openreach New Site Identity Ref. | |

Openreach Contact

| | |
|---------------------------------|--|
| New Sites Office | |
| FBC Name | |
| Telephone | |
| Email | |
| Off-site Connection Location | |
| First Occupation Date | |
| Site Start Date | |

Quality control checklist

| Item being audited | Category | Checked and Acceptable Standard? | | | Comments |
|---|-----------|----------------------------------|----|-----|----------|
| | | Yes | No | N/A | |
| Base has been cast correctly. | Joint Box | | | | |
| Reinforced base cast correctly for Joint Box Carriageway JBC (N). | Joint Box | | | | |
| Bearers and brackets fitted. Steps fitted where appropriate. | Joint Box | | | | |
| Bolts fitted and positioned correctly during construction of boxes. | Joint Box | | | | |
| Joint Box constructed to correct dimensions and installed at the correct depth. Any deviations to plan recorded and signed off. | Joint Box | | | | |
| All concrete/brickwork carried out as per developer 'How to' guide specification. | Joint Box | | | | |
| Cement and brick types used as specified or exceptions agreed and documented. | Joint Box | | | | |
| Frames and covers bedded and correctly installed (if unmade surface, Joint Box frame secured). | Joint Box | | | | |
| Joint Box constructed as planned, positioned correctly and conforms to drawings. Alternatives agreed and documented. | Joint Box | | | | |
| Modular box installed and prepared as per instructions. | Joint Box | | | | |
| Ducts properly trimmed and keyed when set in walls. | Joint Box | | | | |
| External cable/Blown Fibre Tubing (BFT) protected and sealed in Joint Box. | Joint Box | | | | |

Quality control checklist

| Item being audited | Category | Checked and Acceptable Standard? | | | Comments |
|---|----------|----------------------------------|----|-----|----------|
| | | Yes | No | N/A | |
| Fibre cable and draw rope provided in sound condition and correctly jointed where applicable. | Duct | | | | |
| Cable/BFT left in planned location. | Duct | | | | |
| Correct rope/cables/tubing installed as per Developer 'How to' guide. | Duct | | | | |
| Correct type of duct provided and used. | Duct | | | | |
| Duct laid in required position, at correct depth and installed in the correct position in the Joint Box. | Duct | | | | |
| Duct properly trimmed and keyed when set in walls. | Duct | | | | |
| Duct separation distance maintained, or exception agreement obtained and documented. | Duct | | | | |
| Ducts laid at minimum depth (350mm), or exceptions agreed and documented. (To be viewed in footway where possible, if not check via Joint Box). | Duct | | | | |
| Joint Box constructed as planned, positioned correctly and conforms to drawings. Alternatives agreed and documented. | Duct | | | | |
| Temporary duct seals fitted to agreed standard. | Duct | | | | |
| Ducts positioned correctly on external walls and in line with the cable entry point. | Duct | | | | |

Quality control checklist

| Item being audited | Category | Checked and Acceptable Standard? | | | Comments |
|--|----------|----------------------------------|----|-----|----------|
| | | Yes | No | N/A | |
| Ducts positioned in line with the cable entry point. | Plot | | | | |
| Customer cable entries correctly positioned and provided. | Plot | | | | |
| External cable/BFT protected and sealed. | Plot | | | | |
| Duct seal Plug 1A fitted. | Plot | | | | |
| Back box installed at entry point. | Plot | | | | |
| Back box fitted at a usable depth, within close proximity to a double 240v outlet for FTTP services. | Plot | | | | |
| Location of unit entry point suitable for FTTP equipment. | Plot | | | | |
| The property has been designed to accommodate voice and data wiring in a convenient place for home owners to use FTTP services. | Plot | | | | |
| A permanent 240 volt supply is required for FTTP. Developer has been informed that no orders can be made or taken via a Service Provider until all installation works of Openreach equipment into each plot has been completed and tested. | Plot | | | | |
| Voice and data cabling provided and terminated correctly for FTTP services. | Plot | | | | |
| If FTTP self install development ONT, BBU, all leads connected correctly and plot commissioned. | Plot | | | | |
| If self install not completed and Openreach completes all internal work then SOD payment for self install is not applied. | Plot | | | | |

Quality control checklist

| Item being audited | Category | Checked and Acceptable Standard? | | | Comments |
|--|---------------------|----------------------------------|----|-----|----------|
| | | Yes | No | N/A | |
| All tubes or cables presented as per schematic diagram and capped. | Multi Dwelling Unit | | | | |
| Designated track ways/trays supports in good working order with separations maintained. | Multi Dwelling Unit | | | | |
| Connectorised fibre cable installed as per schematic in accordance with Manufacturer's specifications and IET wiring regulations. Cable labelled and coiled safely within riser. | Multi Dwelling Unit | | | | |
| Connectorised fibre cable installed with 1m of spare length protruding from the back box to enable jointing. | Multi Dwelling Unit | | | | |
| Back box fitted in each unit at a usable depth, within close proximity to a double 240v outlet for FTTP connectivity. | Multi Dwelling Unit | | | | |
| Location of unit entry suitable for FTTP equipment. | Multi Dwelling Unit | | | | |
| If FTTP self install development ONT, BBU, all leads connected correctly and plot commissioned. | Multi Dwelling Unit | | | | |
| If self install but Openreach completed all internal work then SOD payment for self install is not applied. | Multi Dwelling Unit | | | | |

13 ONT plot stickers

| Plot # | ONT Barcode Sticker |
|---------|---------------------|
| 1 | |
| Address | |
| 2 | |
| Address | |
| 3 | |
| Address | |
| 4 | |
| Address | |
| 5 | |
| Address | |
| 6 | |
| Address | |
| 7 | |
| Address | |
| 8 | |
| Address | |
| 9 | |
| Address | |

| Plot # | ONT Barcode Sticker |
|---------|---------------------|
| 10 | |
| Address | |
| 11 | |
| Address | |
| 12 | |
| Address | |
| 13 | |
| Address | |
| 14 | |
| Address | |
| 15 | |
| Address | |
| 16 | |
| Address | |
| 17 | |
| Address | |
| 18 | |
| Address | |

ONT plot stickers

| Plot # | ONT Barcode Sticker |
|-----------|---------------------|
| 19 | |
| Address | |
| 20 | |
| Address | |
| 21 | |
| Address | |
| 22 | |
| Address | |
| 23 | |
| Address | |
| 24 | |
| Address | |
| 25 | |
| Address | |
| 26 | |
| Address | |
| 27 | |
| Address | |

| Plot # | ONT Barcode Sticker |
|-----------|---------------------|
| 28 | |
| Address | |
| 29 | |
| Address | |
| 30 | |
| Address | |
| 31 | |
| Address | |
| 32 | |
| Address | |
| 33 | |
| Address | |
| 34 | |
| Address | |
| 35 | |
| Address | |
| 36 | |
| Address | |

ONT plot stickers

| Plot # | ONT Barcode Sticker |
|-----------|---------------------|
| 37 | |
| Address | |
| 38 | |
| Address | |
| 39 | |
| Address | |
| 40 | |
| Address | |
| 41 | |
| Address | |
| 42 | |
| Address | |
| 43 | |
| Address | |
| 45 | |
| Address | |
| 46 | |
| Address | |

| Plot # | ONT Barcode Sticker |
|-----------|---------------------|
| 47 | |
| Address | |
| 48 | |
| Address | |
| 49 | |
| Address | |
| 50 | |
| Address | |
| 51 | |
| Address | |
| 52 | |
| Address | |
| 53 | |
| Address | |
| 54 | |
| Address | |
| 55 | |
| Address | |

ONT plot stickers

| Plot # | ONT Barcode Sticker |
|---------|---------------------|
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |

| Plot # | ONT Barcode Sticker |
|---------|---------------------|
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |
| | |
| Address | |

openreach

openreach.co.uk

The telecommunications services described in this publication are subject to availability and may be modified from time to time. Products and services are provided subject to British Telecommunications plc's respective standard conditions of contract. Nothing in this publication forms any part of any contract. Openreach and the Openreach logo are trademarks of British Telecommunications plc.

© British Telecommunications plc 2019.

Registered office: 81 Newgate Street, London EC1A 7AJ

Registered in England No: 1800000.

Produced by Openreach.

Designed by westhill.co.uk

PHME 84937