

Utilities Report

Northwood and Pinner NHS

65201169/HK/210304
Revision 02

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1 Introduction

This report identifies the existing utilities in the vicinity of the Northwood and Pinner NHS development and collates information received from utilities companies and surveys. The information used consists of desktop studies conducted by individual utility companies and collated by 'Groundwise' and was collected in September 2015, prior to Sweco's involvement with the project.

The drawings provided by the relevant utility companies show indicative positions only of the major service routes. Services below ground are notoriously difficult to accurately identify and it should not be assumed that a service not indicated does not exist.

It will be the responsibility of the Contractor to ascertain that the current utility service maps are used prior to commencement of demolition or construction. Maps used for this purpose must be at suitable scales to allow accurate and safe investigations. Hand excavated trial pits should be made before any mechanical excavation works begins. Services shall be clearly identified and marked when recorded as found. Compliance with safe digging practices such as HSG 47 shall be adhered to at all times.

1.1 'Groundwise' Search Results

1.1.1 Affected Services

As part of Groundwise's search, the following utilities companies were contacted and have confirmed the presence of the utilities near to the site:

- UK Power Networks (UKPN)
- Affinity Water
- Thames Water
- National Grid (Gas)
- BT
- Virgin Media

1.1.2 Unaffected Services

As part of Groundwise's search, the following utilities companies were contacted and have confirmed that their apparatus is not present near to the site:

- Energetics
- GTC
- SSE
- Vodafone
- KCOM
- BSKYB
- Colt
- Instalcom
- Verizon
- OFCOM
- Trafficmaster
- Plancast
- Fulcrum
- Telent
- EU Networks
- Citigen
- London Underground
- London Overground
- TfL
- London Underground Asset Power
- Network Rail
- Crossrail
- MOD
- McNicholas – TATA
- McNicholas - KPN
- CityFibre
- Interoute

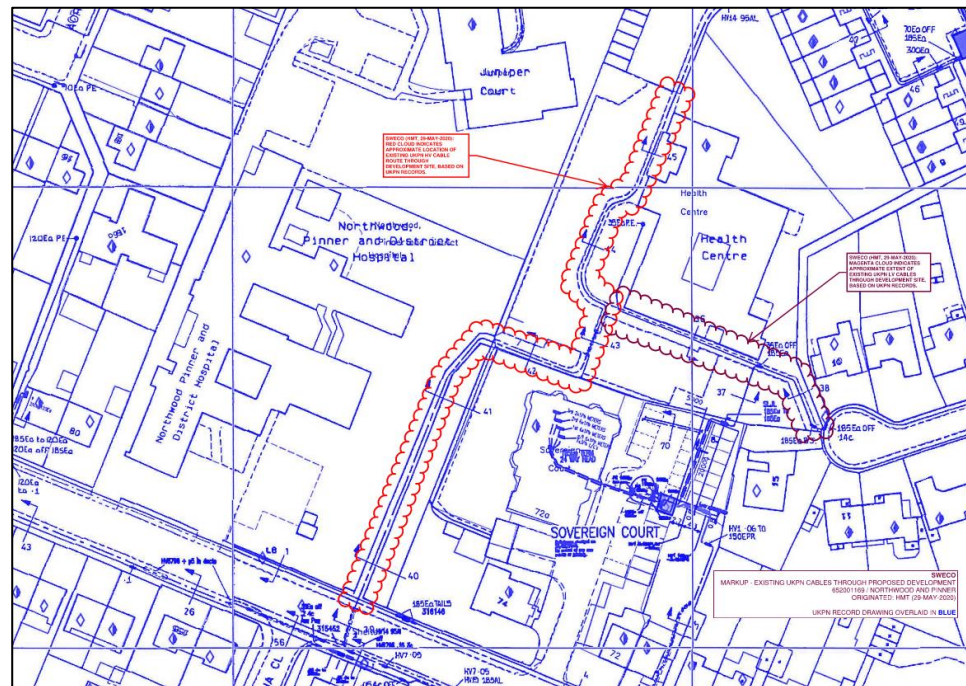
2 Affected Utilities

2.1 Electrical (UKPN)

The enquiry response from UK Power Networks (UKPN) indicates, as shown in the image below, that they have existing services crossing the development.

The service highlighted in red is an HV cable and the service highlighted in purple is an LV cable. Both services pass adjacent to or underneath the proposed apartment blocks and hence would likely clash / interfere with the building foundations. These services will therefore need to be re-routed. Given that 2 new substations are proposed for this site the re-routing of these cables would also need to be carried out concurrently.

A dialogue has been established with UKPN regarding the existing cables and discussions are under way to find the most efficient and cost-effective solution for the safe re-routing of these cables to avoid proposed foundation locations. This activity is currently ongoing. The exact locations of the services need to be confirmed by a ground survey prior to the commencement of any works.



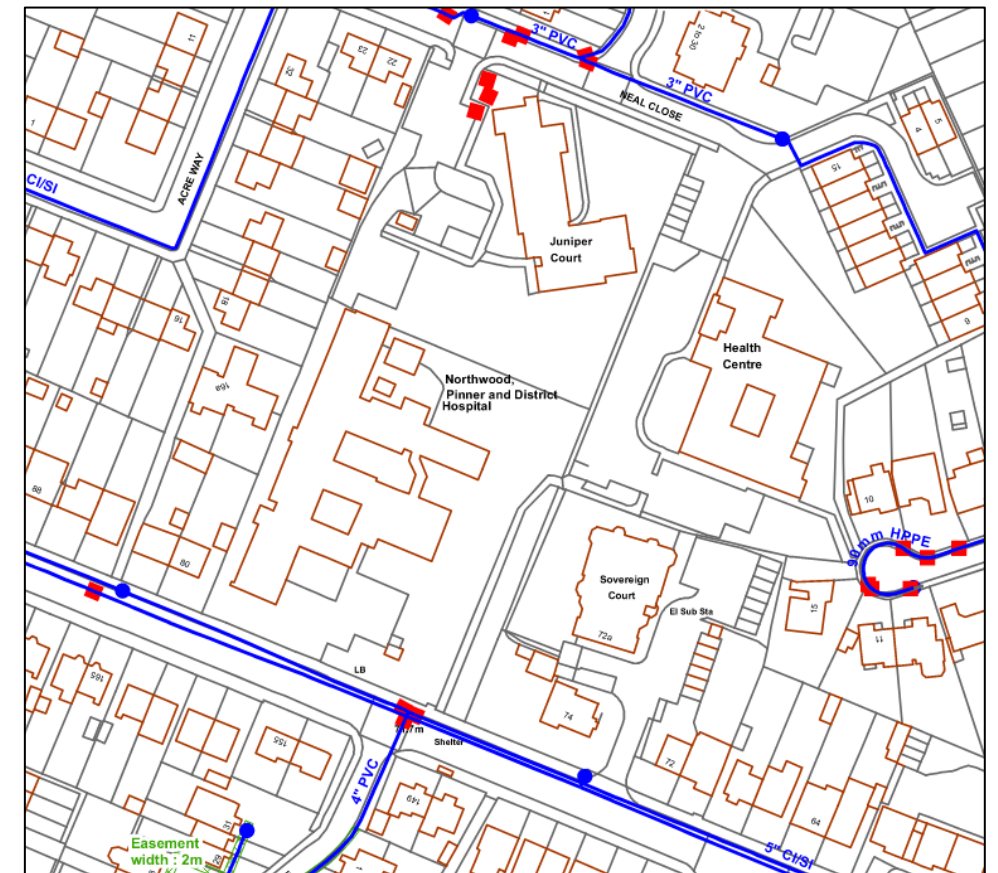
Existing UKPN services in proximity to Northwood and Pinner NHS Site

2.2 Water

2.2.1 Affinity Water

The enquiry response from Affinity Water indicates, as shown in the image below, that they have existing services in proximity to the site but not any services either crossing the site or serving the existing buildings.

All of the existing services remain outside of the boundary of the site however it is unclear whether the existing buildings are served. We would therefore advise that the exact locations of the services need to be confirmed by a ground survey.



Existing Affinity Water services in proximity to Northwood and Pinner NHS Site

02

Existing Utilities

2.3

Gas

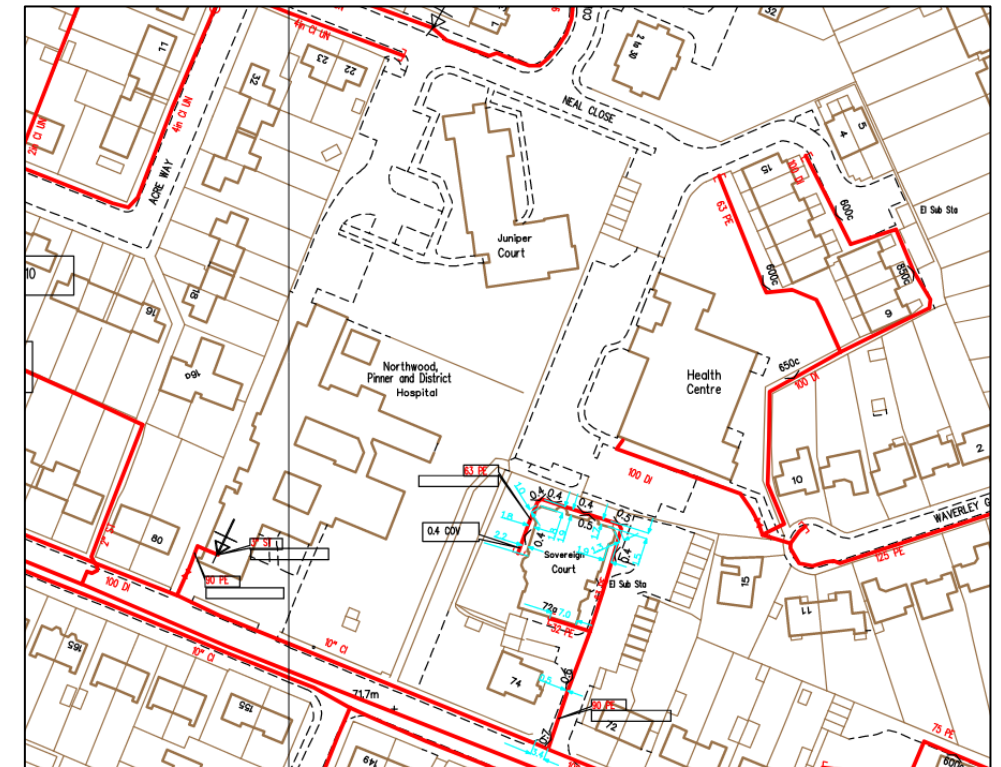
The enquiry response from National Grid indicates, as shown in the image opposite, that they have existing services in proximity to the site and entering the site to serve the existing buildings.

There is an existing low-pressure gas main serving the 'Northwood and Pinner District Hospital' from Pinner Road with this service appearing to line up with the assumed location of the existing basement gas boiler room. It is assumed therefore that this gas pipe is supplying the boilers which are currently proving heating and hot water to the Health Centre.

The design intent is to use VRF units to provide heating and hot water to the renovated Health Centre and hence the gas supply will no longer be required. This supply will therefore need to be made safe and capped off at the site boundary. The exact locations of the service will need to be confirmed by a ground survey prior to the work being carried out.

There is also an existing low-pressure gas main serving the 'Health Centre' from Waverley Gardens. The design intent for residential block B, which will be built on this part of the site, is to provide heating and hot water via air source heat pumps and hence the gas supply will no longer be required. This supply will therefore need to be made safe and capped off at the site boundary. The exact locations of the service will need to be confirmed by a ground survey prior to the work being carried out.

There is also a second supply from Waverley Gardens that passes north-south passed the rear of the existing 'Health Centre' and through the gardens of the adjacent houses. The exact location of this service will need to be confirmed by a ground survey in order to establish whether it passes through the site and therefore whether it will interfere / clash with the foundation design.



Existing National Grid services in proximity to Northwood and Pinner NHS Site

02

Existing Utilities

2.4 Comms / IT

2.4.1 BT

The enquiry response from BT indicates, as shown in the image below, that they have existing services in proximity to the site and entering the site to serve the existing buildings.

There is an existing connection serving the 'Northwood and Pinner District Hospital' from Pinner Road and a similar connection serving the 'Health Centre' from Neal Close.

It is assumed that the existing connection the 'Northwood and Pinner District Hospital' can be retained however the service to the 'Health Centre' will likely need to be upgraded / replaced so that it is capable of serving the proposed Block B apartments. A new connection will be required from Pinner Road to serve the Block A apartments.

The exact locations of the services will need to be confirmed by a ground survey prior to any work being carried out.



Existing BT services in proximity to Northwood and Pinner NHS Site

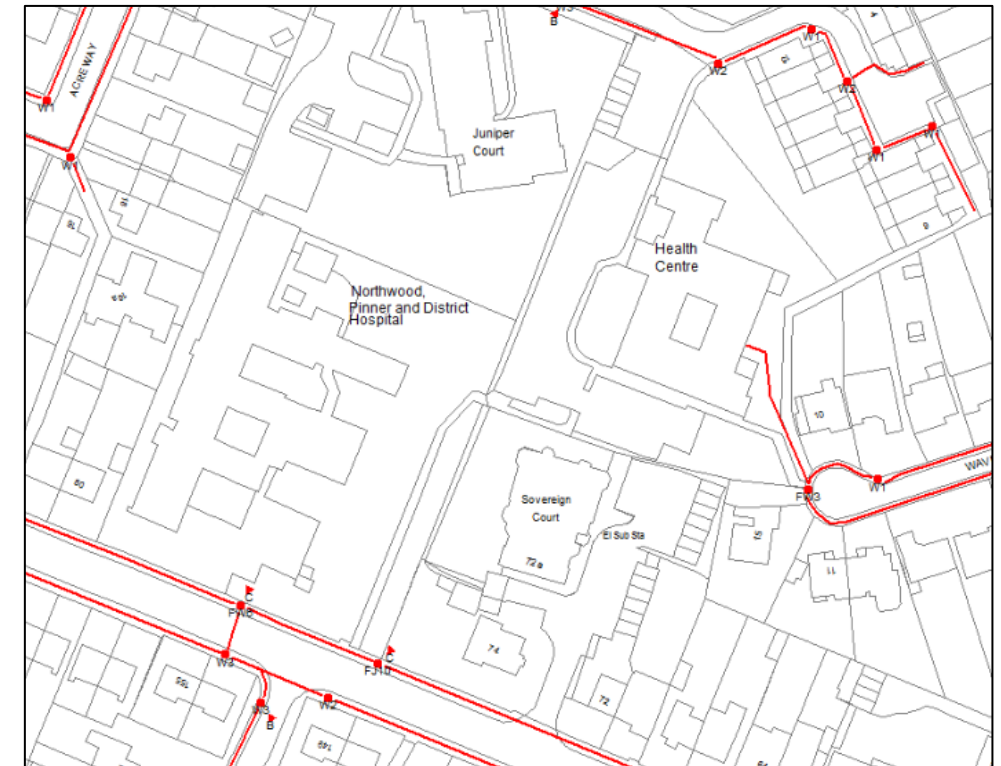
2.4.2 Virgin Media

The enquiry response from Virgin Media indicates, as shown in the image below, that they have existing services in proximity to the site and entering the site to serve the existing buildings.

There is an existing connection serving the 'Health Centre' from Waverley Gardens.

This service to the 'Health Centre' will likely need to be upgraded / replaced so that it is capable of serving the proposed Block B apartments. A new connection will be required from Pinner Road to serve the Block A apartments.

The exact locations of the services will need to be confirmed by a ground survey prior to any work being carried out.



Existing Virgin Media services in proximity to Northwood and Pinner NHS Site

3

Conclusions

As described above, a number of service providers have provided details of existing services in the area surrounding the Northwood and Pinner NHS site. As set out in section 2.1, the existing UKPN HV and LV cables pose the greatest current risk in terms of existing services and gaining extra clarity and certainty about these is ongoing and of prime importance.

Existing gas supplies will also need substantial work however these are of less concern as the current pipes serve the existing buildings and do not travel across the site to other areas.

As mentioned a number of times above, further exploration via a ground survey prior to any work being carried out will be necessary in order for the exact locations of the services to be confirmed. This work will be carried out at the next stage.