

Connect it

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Utilities Assessment Report

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The South's Leading Multi-Utility Experts



Notice

This document has been prepared exclusively for Dandara Southern for the purposes outlined herein. Connect It assumes no responsibility to any other party arising from the use or reliance on this document.

Document history

Project ID	Document Ref	Revision	Purpose	Originated	Checked	Date
MU4578	Utilities Assessment Report	1.0	Feasibility Report	RM	RL	28.11.2024

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1. Introduction

Connect It Utility Services Limited has been engaged by Dandara Southern to evaluate the site wide utility constraints for the development site currently known as Reading Road, Arborfield.

The proposed development site is in Arborfield a town in Reading between Shinfield and Arborfield Cross, approximately 3 km from the City Centre. The site which area of 4.93.

The estimated 113,633 sqft development will comprise of a residential site comprising of houses and flats.

The site location and proposed layout are shown on the plans provided by Dandara Southern which are appended to this report.

This report assesses the existing utility assets identified in the vicinity of the proposed development site, based on the results of utility searches carried out by Connect It under reference MU4578. The report evaluates the existing utility infrastructure and any constraints under the following criteria:

- **Existing Infrastructure**
Review of existing assets, their location regarding proximity to the site and their attributes.
- **Point of Connection & Network Capacity**
Identification of the anticipated point of connection to existing infrastructure to service the proposed development and review of expected network capacity.
- **Diversions & Disconnections**
Summary of any expected diversionary works of existing assets to facilitate the proposed development including any disconnection of existing services.

The utilities that fall within the scope of this report include high voltage (HV), bw voltage (LV) electricity, low pressure (LP), medium pressure (MP), telecommunications, potable water and wastewater mains.

Assumptions

A desktop study indicates that the site was previously a green field.

2. Electricity Infrastructure

2.1. Scottish & Southern Energy (SSE)

Existing Infrastructure

Records received from SSE indicate that there are a no substations in the vicinity of the development site. Those that are in closest proximity are detailed below:

- Farley Farms S/S located southeast of the site, approximately 400m South of the site entrance.
- The Bull Arborfield Cross S/S located on the Chamberlain Gardens assumed on third party land, approximately 920m East of the site entrance.
- Arborfield School S/S located on The Coombes C of E School assumed third party land approximately 1.25km east of the site entrance.

Following a review of the location of the above substations against the site layout, it is not considered that they pose a constraint as they are outside of the development area.

The following HV infrastructure is noted in the vicinity of the site:

- A PMT inside the site boundary fed by HV overhead lines
- A HV underground cable 25m from the site entrance on the other side of Reading Road in the pathway.

Records indicate the following LV infrastructure in the vicinity of the site:

- Overhead LV cable spanning from the onsite PMT feeding the network south of site.
- Overhead LV cable spanning from the Reading Road along Church Lane to the West of site
- Underground LV cable running from Greensward Lane approximately 340m from the site entrance.

Point of Connection & Capacity

A proposed 347kVA has been confirmed from SSEN for the development via 1 x HV Pole Termination & 1 x HV Straight joint on the existing 11kV HV underground cable approximately 25m from the site entrance. SSEN will also dismantle 2 x poles and spans.

Dependencies: This job is dependent on the completion of technical tee proposed under accepted job FAW417 (estimated September 2025).

Also works for point of connection cannot be undertaken until damaged SSEN equipment has been

replaced.

Diversions & Disconnections

There is an HV Overhead line running through the site from Cross Lanes Farm PMT and spans off east from a Tee via two more poles that will all need removing and diverting underground.

Application to SSEN should be made for the disconnection of any existing live LV service connections to the site that are no longer required. Alternatively, these could be repurposed for a temporary building supply if required.

3. Gas Infrastructure

3.1. Southern Gas Networks (SGN) & GTC

Existing Infrastructure

Records we have received from SGN indicate that there is gas infrastructure in the surrounding area of the site, with MP 250" PE main which is shown to run Reading Road, this would require a gas governor onsite.

Point of Connection & Capacity

We have carried out an internal assessment and the 250mm pipe is believed to be a suitably sized main to supply the new site if gas is required. The 250mm main will need to be verified for capacity by further application to SGN.

Diversions & Disconnections

Application to SGN should be made to disconnect any existing gas service if needed if not already disconnected.

4. Telecommunications Infrastructure

4.1. Virgin Media

Existing Infrastructure

Asset maps indicate that there are Virgin Media assets installed across the junction of the site entrance on the adjacent side of the road.

5. Water Infrastructure

5.1. Thames Water

Existing Infrastructure

Records indicate that there is a 75mm HPPE potable water distribution main infrastructure running along Walden Avenue approximately 160m from the site entrance.

A further 100mm HPPE potable water distribution main is located in Chamberlain Gardens on the corner of Gable End and Swallowfield Road.

Point of Connection & Capacity

It is assumed that the 100mm main on Chamberlain Gardens would be a suitable point of connection to service the development. Application should be made to Thames Water to confirm the point of connection and costs when water demand is confirmed.

The existing mains in the vicinity of the development are assumed to be of suitable size to supply this development, however confirmation from Thames Water of the available capacity should be obtained through a point of connection application.

Diversions & Disconnections

On review of the location of the mains identified there are large diameter trunk mains that run along the site boundary to the south, these will be protected by easements that will prevent the erection of buildings within a set distance.

Thames Water asset plans do not record the locations of existing service pipes but from review of the site history there was an existing domestic property which should be assumed was serviced by a potable water supply that may require disconnection.

6. Wastewater Infrastructure

6.1 Thames Water

Existing Infrastructure

Records indicate an existing 150mm foul sewer runs South of site entrance on Reading Road, approx. 15m away from site entrance.

A pressured main runs parallel South of the site outside the site boundary.

Point of Connection & Capacity

The foul sewer that runs South of the site entrance on Reading Road is anticipated as the point of connection as a direct sewer connection, a Section 106 application will need to be made to Thames Water when detailed drainage designs are available to confirm and assess current network capacity.

Diversion & Disconnections

The 150mm foul sewer is not expected to require diversion or a build over agreement unless ground level changes are proposed. In which case application to Thames Water for a S185 diversion should be made to assess the scope.

7. Liability

7.1. Existing Plant

The quality and accuracy of information provided by utilities about their existing plant is indicative and no warranty is made as to its accuracy. Therefore, any map extracts and/or marked up drawings provided by each utility must only be used as a guide and the actual location of plant should be verified by CAT scan or trial holes before construction works commence. It is the responsibility of any on site contractor to identify and locate any utility plant prior to development work going ahead. It is enshrined in the NRSWA that it is the responsibility of any on site contractor to ensure the safety of its employees on site in relation to utility plant and to ensure that there is no damage to utility plant caused by site works.

7.2. Liability

Where applicable, our estimates provided in the course of completing this review, are provided on the basis of our experience and are accordingly on an estimate basis. The client should be aware that actual charges made by utilities providers are determined by a number of factors. Accordingly any cost estimates provided are for information purposes only. If the client wishes to have more robust information, better information on localised proposals and phased development proposals should be provided and further estimates should be obtained from utilities providers as and when the better information becomes available. Connect It Utility Services Limited will take all reasonable steps to obtain the most robust information but shall accept no liability for the accuracy of such information or report.

8. Appendices

8.1 Appendix 1 - Site Location & Layout

8.2 Appendix 2 - SSEN Asset Map

8.3 Appendix 3 - SGN Asset Map

8.4 Appendix 4 - Virgin Media Asset Map

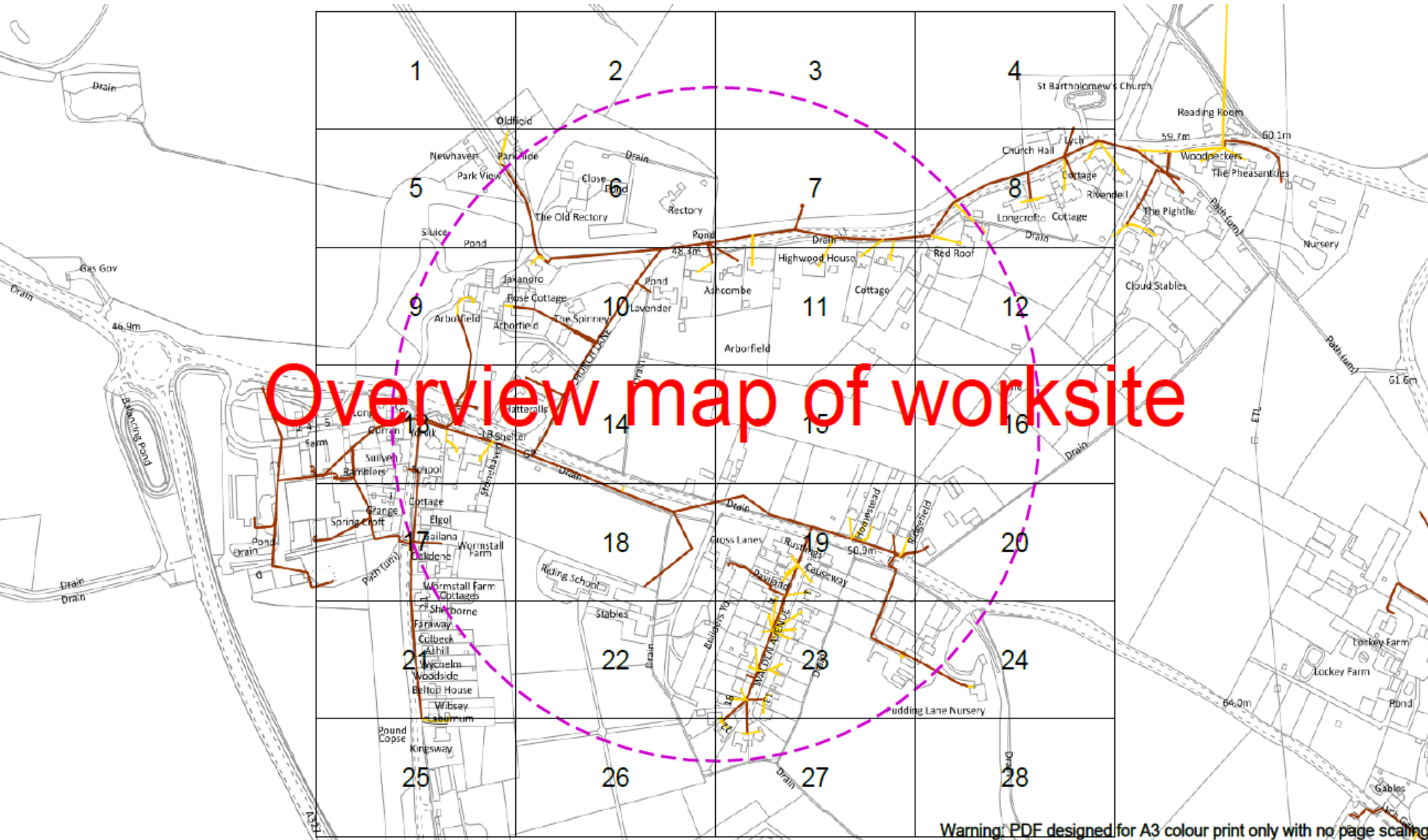
8.5 Appendix 5 - Thames Water Potable Water Asset Map

8.6 Appendix 6 - Thames Water Wastewater Asset Map

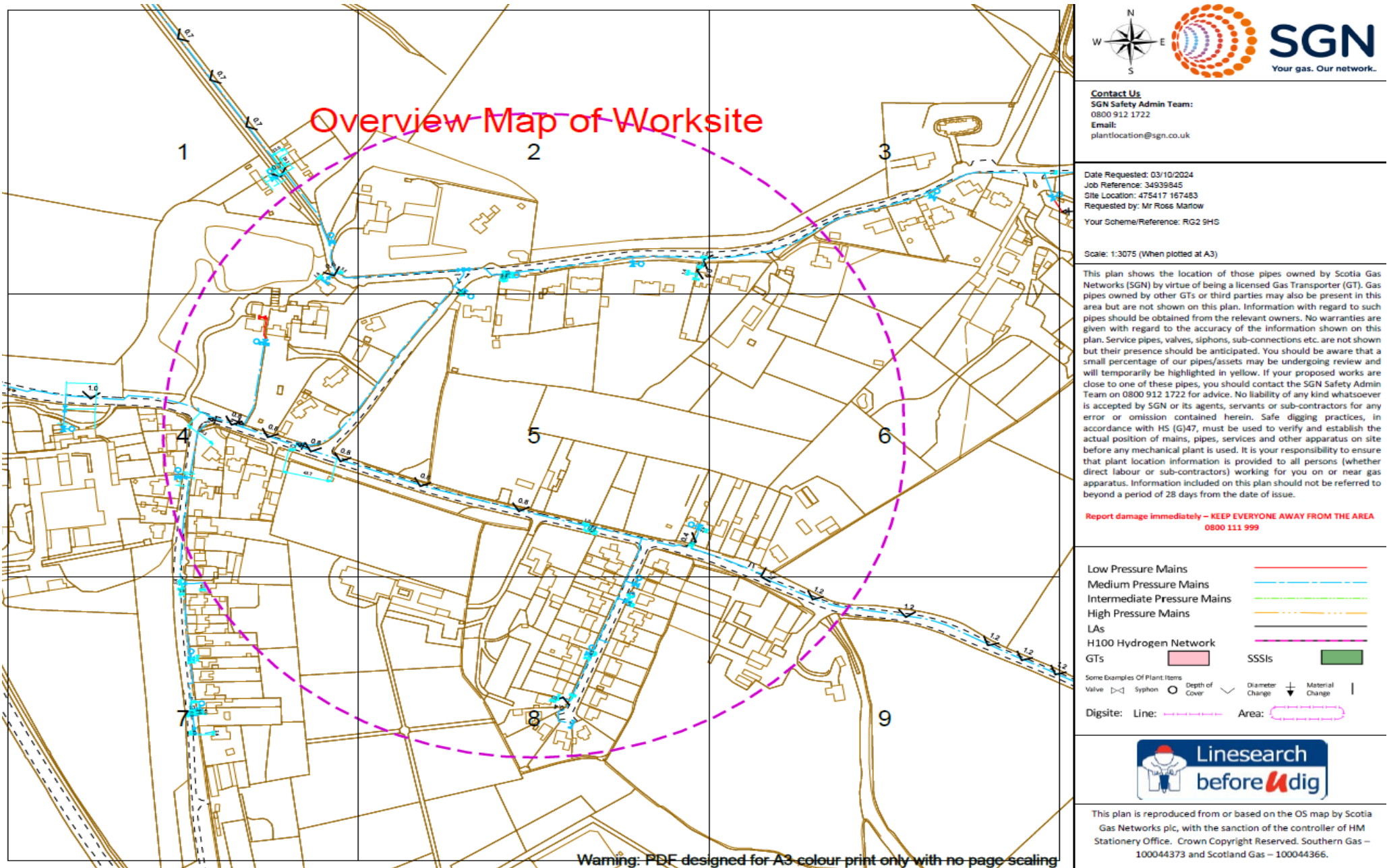
8.1. Appendix 1 - Site Location & Layout



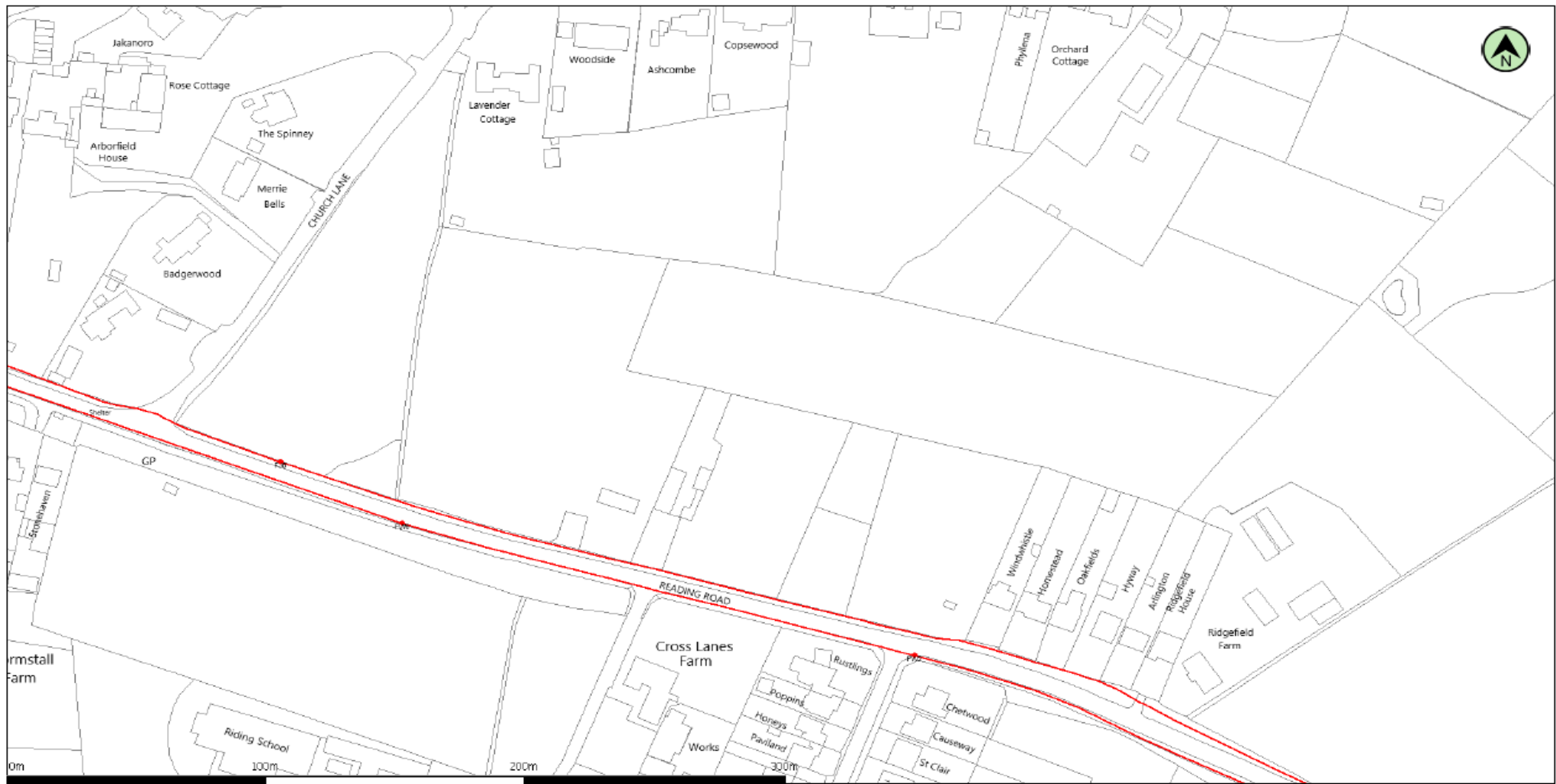
8.2 Appendix 2 - SSEN Asset Map



8.3 Appendix 3 - SGN Asset Map

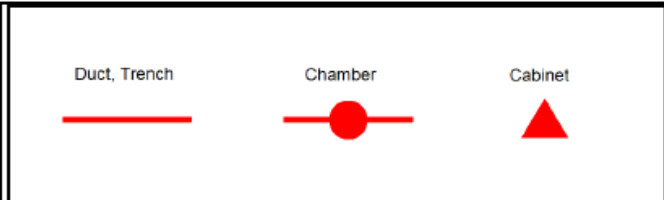


8.4 Appendix 4 – Virgin Media Asset Map



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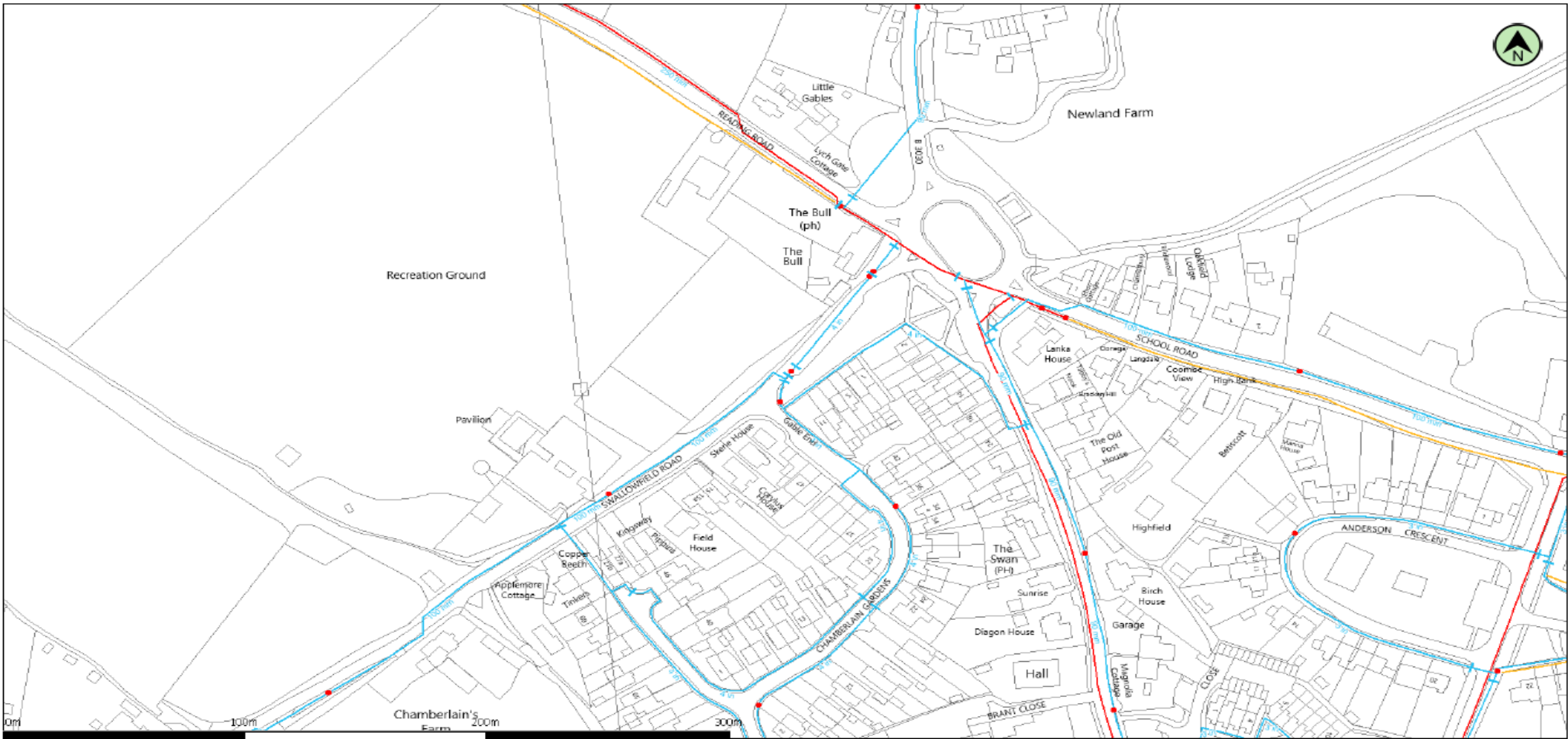
Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have 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 2024 Ordnance Survey AC0000818557.



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8.5 Appendix 5 – Thames Water Potable Asset Map



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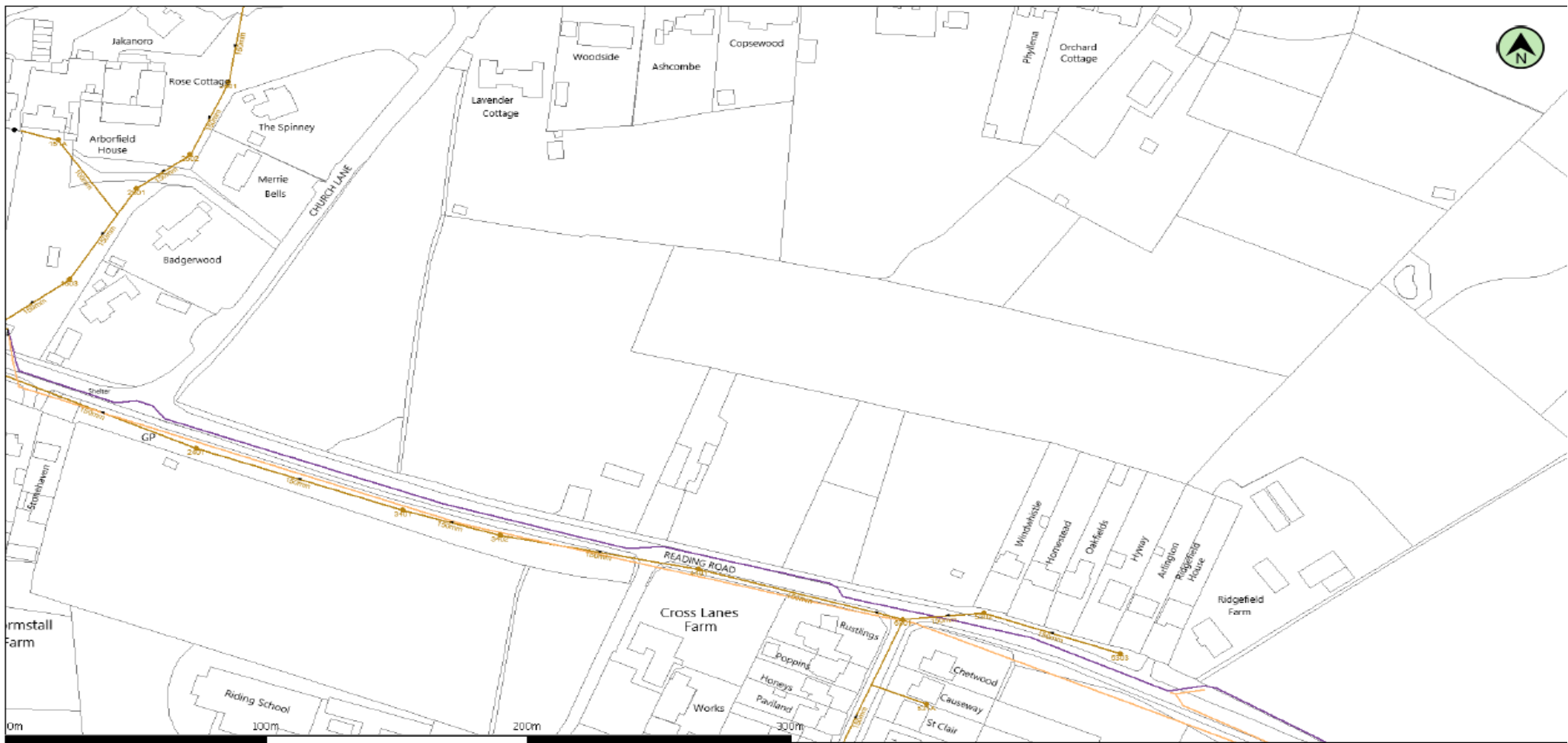
This plan is produced by Thames Water Utilities Ltd (c) Crown copyright and database rights 2024 Ordnance Survey AC0000849556. This map is to be used for the purposes of viewing the location of Thames Water plant only. Any other uses of the map data or further copies are not permitted. The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. This information is valid for the date printed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified on site before any works are undertaken.

Water Main		Meter	
Private Water		Valve	
Proposed Water		Hydrant	
Trunk Main		End Item	
Proposed Trunk Main		NAV Area	
Abandoned Asset			

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8.6 Appendix 6 – Thames Water Potable Water Asset Map



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Foul Sewer	Other Sewer	Foul Manhole
Surface Sewer	Private Asset	Surface Manhole
Combined Sewer	Proposed Asset	Combined Manhole
Abandoned Sewer	NAV Area	Abandoned Manhole
Pressure Main		Other Manhole
		Private Manhole
		End Item
		6164 Boundary

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