

A large, abstract graphic element is positioned at the top of the page, consisting of several concentric, curved bands in shades of light blue, teal, and white. It has a soft, organic, and modern feel.

Land at Chesapeake, Reeds Lane, Sayers Common BN6 9GB Utilities Appraisal

Prepared for Antler Homes
By Technical & Development Services (Southern) Ltd

Project Information

Title	Utilities Appraisal
Site Location	Land at Chesapeake, Reeds Lane, Sayers Common BN6 9GB
Client	Prepared for Antler Homes
TDS Project Number	AHP.U.13
Document Ref	UR-01
Prepared by	Technical & Development Services (Southern) Ltd Hillreed House, 54 Queen Street Horsham West Sussex RH13 5AD
Document File path	U:\Utilities\Antler Homes\AHP.U.13 - Land at Chesapeake, Sayers Common\Admin\Report

Issue History

Issue	Date	Author	Author signature	Approver	Approved signature
01	13/02/2023	Dan Wright	<i>D. Wright</i>	Simon Lepine	<i>S. Lepine</i>

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1 Background

1.1 The Site

Antler Homes has engaged Technical and Development Services (Southern) Ltd. (TDSS) to determine the availability and sufficiency of existing utilities to serve a proposed residential development of 33 homes on the above site, and to identify any utility apparatus on, or adjacent to the site, that may be affected by the development. Budget Costs for provision of the mains and connections required to service the development were also sought.

1.2 Proposed Development

The site is located within the village of Sayers Common, in the Mid Sussex District of West Sussex, it is located two miles north-west of Hurstpierpoint. The site is an existing dwelling that is to be demolished, the development will be on the existing grounds and the green open space to the rear of the existing property. The site is bounded to the north by Reed's Lane, to the east and south by green open space and to the west by Meadow View and to the north by the existing residential dwellings n Osborn Close.

1.3 Proposed Re-Development

The proposed site plan provided indicates a mix of 1, 2, 3 and 4 Bed units.

Total No. of Domestic Units; 33

1.4 Planning History

A search of Mid Sussex District planning portal has confirmed there is currently no planning applications in for the development.

1.5 Information Provided

The information provided to TDSS, for the purpose of the initial enquiries to the utility network providers, comprised the following.

- Contract Plan – Drawing number FA20-1796-075, dated September 2020 Revision E by Fluid Urban Design.
- Proposed Site plan – Drawing number FL22-1994-050, dated DEC 22, No Revision y Fluid London.

1.6 Caution

In preparing this report TDSS has taken all reasonable steps to present the client with an accurate evaluation of the data available. However TDSS cannot accept responsibility for the accuracy of information provided by third parties (the utility network providers and/or their agents) and accepts no liability for any direct or consequential loss that may be incurred if information provided by those parties proves to be incorrect or inaccurate.

A copy of the Contract plan and proposed site layout are reproduced at Appendix 1

1.7 Statutory Undertaker Initial Enquiries

Initial enquiries of the statutory undertakers, as to the location and sufficiency of the utility supplies to serve the proposed development, were made by TDSS in November 22. Budget costs for providing the site mains and house connections were also requested.

Plans of the location of utility apparatus that might constrain the development, or be affected by it, were also sought. The responses and their implications on the redevelopment of this site, to provide up to 33 homes, are set out in the following sections of this report.

2. Drainage Infrastructure

2.1 Sewerage Provider

The Sewerage Undertaker for the area is Southern Water (SW)

2.2 Existing Apparatus

SW Sewer Map indicates:

- An existing 150mm Vitrified Clay (VC) public foul water sewer located within Reed's Lane.

2.3 Available Capacity and Point of Connection

2.3.1 Foul Drainage

Under the connections regulations now in force, the Sewerage Company is obliged to provide a point of connection for new developments at "the nearest reasonably practicable point" on its network where the parent sewer is the same diameter, or greater, than that of the connection from the development. Should the Company require the connection to be made elsewhere on its network, for capacity reasons, it will be responsible for any works required to provide that capacity downstream of "the nearest reasonably practicable point" of connection meeting the condition on respective pipe sizes. Any network reinforcement costs required shall be recovered by the Company through the infrastructure charges levied on new connections, and/or its own capital program allocation.

Accordingly, provided the identified point of connection is accessible to the developer over public highway, or other public land, i.e., a Sewer Requisition is not required, the developer can exercise the right to connect, subject to payment of the relevant connection charges, which are fixed annually and published by the Company.

Southern Water have confirmed in their response to the pre-development enquiry that there is sufficient capacity within the existing sewer to accommodate the proposed development, with a connection into manhole 4101.

Sewerage Infrastructure Charge (2022-2023) is a charge of £608.00 per connected property.

2.3.2 Surface Water Drainage

The policy of Planning Authorities and the Water & Wastewater Companies, in relation to the management of surface water run-off from new developments, is that a development should utilize sustainable urban drainage systems (SuDS) unless that proves not to be feasible, given the site and ground conditions, and should aim to achieve 'greenfield' run-off rates. Surface water run-off shall be managed as close to its source as practicable, in accordance with the following drainage hierarchy.

- store rainwater for later use
- use infiltration techniques, such as porous surfaces in non-clay areas
- attenuate rainwater in ponds or open water features for gradual release
- attenuate rainwater by storing in tanks or sealed water features for gradual release
- discharge rainwater direct to a watercourse
- discharge rainwater to a surface water sewer/drain
- discharge rainwater to the combined sewer

2.4 Sewer Connections and Adoption Costs

With effect of 1st April 2020, Ofwat introduced new charging rules that require developers to meet the full costs of any off-site sewer requisitions, i.e. no or a reduced 'income offset' will be payable by Sewerage Companies for sewer requisitions. Where developers elect to employ accredited self-lay providers for off-site sewer constructions, the equivalent 'asset payments' will no longer be made. The additional costs will therefore need to be provided for, see Southern Water "Statement of Significant Changes for 2022-23 New Connection Charges" on website.

Wastewater Income Offset (2020-2021) is a credit of £193.00 per connected property.

Southern Water Network Plans and Pre-Development Enquiry are reproduced at Appendix 2.

3. Water Infrastructure

3.1 Water Supply Company

The Potable Water Supplier (DNO) for the area is Southeast Water (SEW)

3.2 Existing Apparatus

SEW mains records indicate.

- An existing 3-inch Cast Iron distribution main site side of Reed's Lane, crossing the proposed site access.

3.3 Available Capacity and Point of Connection

Under Section 37 of the Water Industry Act 1991, the Water Company is required to "develop and maintain a system of water supply such that it can have supplies available to persons demanding them," i.e., it is obliged to provide a point/s of connection for new development at the nearest practicable point to the site. Any reinforcement works required must now be funded by the Water Company subsidized by way of the Infrastructure Charges Levied on all new connections.

Water Infrastructure Charge (2020-2021) is a charge of £663.00 per connected property.

With effect of 1st April 2020, OFWAT has introduced new charging rules that require developers to meet the full costs of mains requisitions (off-site and on-site), i.e., no or a reduced 'income off-set' will be payable by the Water Company (if company laid) and no asset payment will be made where developers elect to employ accredited self-lay providers.

If the water company wishes to continue applying income off-sets, the charging rules require that this must be applied to the infrastructure charges instead. OFWAT has stated that the infrastructure charge income water companies receive must continue to match their average spends on network reinforcement over the 5 years to 31st March 2023.

Southeast Water have confirmed within their pre-development enquiry response that the existing 3-inch distribution main has sufficient capacity to serve the development.

Water Income Offset (2020-2021) is a credit of £608.00 per connected property.

3.4 Mains and Connections Costs

All costs and charges relating to water mains requisition, off site connections, off site mains, on site mains and house connections, and all associated costs, both statutory (company laid) and self-laid are now fixed annually and published and can be found in Southeast Water Network Records & Capacity Check Response are reproduced at Appendix 3.

4. Gas Infrastructure

4.1 Gas Network Operator

The Distribution Network Operator (DNO) for the area is Southern Gas Networks (SGN)

4.2 Existing Apparatus

SGN'S network records currently indicate.

- An existing 125mm Low Pressure Polyethylene (PE) Gas main on the northern side of Reed's Lane, opposite the proposed site.

4.3 Available Capacity and Point of Connection

There is sufficient gas infrastructure near the proposed development however the client has decided not to take up a gas connection for the development and has decided to use an all-electric solution for the proposed heating strategy for the development, therefore no gas quotation has been procured for the development.

SGN Network Records are reproduced at Appendix 4.

5. Electricity Infrastructure

5.1 Electricity Network Operator

The Distribution Network Operator (DNO) for the area is UK Power Networks (UKPN)

5.2 Existing Apparatus

UKPN Network Records indicate.

- An existing Low Voltage overhead cable network within Reeds Lane.
- An existing High Voltage overhead cable network crossing the proposed site.

5.3 Available Capacity and Point of Connection

UKPN has provided a Budget Estimate for the electricity infrastructure required to supply the development based upon a connection to their existing high Voltage cable network that crosses the proposed development.

5.4 Budget Estimate

UKPN Budget Estimate for the required electricity infrastructure based on a High Voltage point of connection off the proposed diverted HV cable will be as follows:

Budget Estimate - £200,000.00 (Exc. Vat)

5.5 Diversion

UKPN assets plans have shown an existing High Voltage overhead cable network crossing the southern part of the proposed development entering the site from the western boundary. UKPN have proposed to divert this cable network underground to accommodate the proposed site.

Budget Estimate: £100,000.00 (Exc. Vat)

5.6 GTC Limited

GTC Limited has provided an electric only Estimate for the provision of Electricity Infrastructure to the proposed development.

Onsite Costs

This is the cost to provide mains and services to the development within the site boundary:

On-site works	
You pay GTC	£21,186.74

Offsite Cost

These costs include any off-site costs that are required, including the costs of Upstream Network Operators (NWO), to complete the work to supply your site:

Off-site works	
Network Operator Costs – Electricity:	£3,000.00
Total Off-site Costs– You pay GTC	£4,245.34
Total payment to GTC	£28,432.08

Electricity

This quotation includes an indicative electric point of connection (PoC) and off-site costs, therefore costs associated with the PoC are subject to change.

However, the PoC and non-contestable charges will be the same regardless of who owns the network. GTC have calculated a total electrical load at 96 kVA. this is based upon GTC Limited's own load calculations with the inclusion of a 7kW Electric Vehicle Charger on each plot & 2 No. 7Kw communal EVC's.

GTC have assumed a Low Voltage point of connection due to the size of the development and have based their assessment on a ASHP solution and have included sufficient capacity to install a 7kW EVC on each domestic plot.

The quote includes the excavation and reinstatement cost within the public highway estimated to be 10m from the site boundary, with all onsite excavations & reinstatements to be completed by the developer.

UKPN Mains Plans, New Supplies Estimates and GTC quote are reproduced at Appendix 5.

6. Telecommunications Infrastructure

6.1 Network Operator

The local telecommunications network operator is Openreach.

6.2 Existing Apparatus

Openreach's network records indicate.

- An existing duct and chamber network site side of Reeds Lane crossing the proposed site access.
- An existing overhead supply crossing the proposed development site, heading west towards Meadow View.

6.3 Proposed Connections

Openreach's policy is that any requirement for reinforcement works up to a value of £3,400 per connected property will be funded by Openreach.

Openreach will also make payment to the developer of £140 for each house connected and £50 for each flat, in return for the developer undertaking the trenching and laying of the required ducts and chambers (supplied by Openreach) within the development.

Openreach will only prepare a site layout and proposal for a fully consented and detailed site layout, following submission by the developer of a firm application for connections.

Due to the size of the development Openreach will provide Fibre to the premise (FTTP) to the development free of charge to the developer.

6.4 Diversions

There is an existing overhead supply that crosses the proposed development area and duct and chamber network crossing the proposed site access. We have made enquires to Openreach they require a survey fee of **£2,581.50** to carry out the detailed survey however the client has decided not to make payment to date, so detailed costs will follow once this fee has been paid.

Openreach's Network Plans are reproduced at Appendix 7.

7. Communications & Media Pipeline Search

The Communication & Media Pipeline Search returned 'NEGATIVE' i.e. 'not affected' responses. Therefore, it is likely that these operators do not have apparatus in the area of the site or its proposed access, and subsequently no apparatus is likely to be affected by the development.

8. 'Linesearch before U dig'

A 'Linesearch' of the national database of utility asset owners registered with 'Linesearch before U-dig' has revealed 'POSITIVE' responses (i.e. the operators have apparatus in the 'search' area)

- Scotia Gas Networks (SGN)
- UK Power Networks (UKPN)

SGN's apparatus is identified and addressed within Section 4.2 of this report.

UKPN's apparatus is identified and addressed within Section 5.2 of this report.

The Linesearch Response is reproduced at Appendix 8.

9. Combined Services Overlay

TDSS have included the existing utility record plans for the local area, over the proposed site plan, to provide a Utility constraints plan for the site.

The Existing Services Overlay is reproduced at Appendix 9.

10. Summary of Utility Budget Costs

Service	Company	On-site	Offsite	Infra fees (Minus Income Offset)	Sub Total
Drainage	Southern Water			£13,695.00	
Water New Supplies	Southeast Water	£135.00 Per meter for onsite water mains	£12,144.00 for the 33-service connection	£924.00	£13,068.00 for service connection and infrastructure chargers. Mains to be confirmed at detailed stage.
Electricity (New Supplies ASHP Heated)	UKPN	£200,000.00			£200,000.00
Electric on-site Diversion	UKPN	£100,000.00			£100,000.00
Electric Only (New Supplies ASHP Heated)	GTC	£28,432.08			£28,432.08
Telecoms (FTTP New Supply)	Openreach	Nil Cost			Nil Cost
Telecoms (Rebate)	Openreach	£4,620.00			£4,620.00
Telecoms (Diversion)	Openreach	TBC			TBC

11. Executive Summary

TDSS enquiries to the utility network providers and their responses to date have revealed some utilities supply impediment to the development of this site, namely diversion of existing Openreach assets to accommodate the proposed site access and the onsite electric and Openreach diversions required to accommodate the development.

Foul Drainage

The Sewer Map indicates a 150mm dia. Public Foul Sewer (Manhole Ref: 4101) located within Reeds Lane. Under the connections regulations now in force (See Section 2.3), there is a right of connection to this sewer - a connection for foul drainage purposes is therefore assured. Southern Water have also confirmed within their response to TDSS enquiries that there is sufficient capacity within the network to accommodate the proposed development.

Surface Water Drainage

The Sewer Map indicates that there is no existing surface water sewer's close to the development, however there is a ditch/watercourse on the southern boundary of the scheme but before southern water allow a connection into this, Southern water will require evidence that all other surface water solutions have been investigated.

Water

A 3-inch distribution main is available within Reeds Lane at the proposed site entrance. Under the connections regulations now in force, the water company is obliged to provide a point of connection for the new development, provided the site connection does not exceed the size of the parent main to which it is to connect, which is the case for this site. A connection is therefore assured. Southeast Water have again confirmed within their response to TDSS enquiries, that there is sufficient capacity within the existing main to accommodate the proposed development.

Electricity

UKPN has provided a 'Budget Estimate', for the required electricity connections, based upon a connection to the high voltage cable network crossing the proposed site.

Telecommunications

Openreach has networks available in Reeds Lane and will provide Fast Fibre (FTTP) connections to the development, free of charge due to the size of the development.

Onsite Diversions

The respective utility network operator plans indicate the following apparatus as located within the existing site.

- UKPN High Voltage overhead cable network
- Openreach Overhead cable network

UKPN Overhead High Voltage cable network

UKPN have provided a budget quotation in the sum of **£100,000.00** to divert/lower the existing overhead cable network, across the proposed development to accommodate the proposed scheme.

Openreach Overhead Cable network

There is an existing overhead supply that crosses the proposed development area and duct and chamber network crossing the proposed site access. We have made enquires to Openreach they require a survey fee of **£2,581.50** to carry out the detailed survey however

the client has decided not to make payment to date, so detailed costs will follow once this fee has been agreed.

Offsite Diversions

The respective utility network operator plans indicate the following apparatus as located within the carriageway of Reeds Lane, at the proposed site access:

- Openreach Overhead cable connection

Openreach Duct and Chamber Network

There is an existing overhead supply that crosses the proposed development area and duct and chamber network crossing the proposed site access. We have made enquires to Openreach they require a survey fee of **£2,581.50** to carry out the detailed survey however the client has decided not to make payment to date, so detailed costs will follow once this fee has been paid.

12. Appendices

Please refer to separate document (AHP.U.06 UR-01 Appendices)

Technical & Development Services (Southern) Ltd
Hillreed House,
54 Queen Street
Horsham
West Sussex RH13 5AD

01403 276 888
southern@t-d-s.com
www.t-d-s.com



Part of Technical & Development Services Group Ltd. Registered in England & Wales No. 5284938.
Registered Office: Venture Court, 2 Debdale Road, Wellingborough, Northants NN8 5AA