# Land South of Allington Lane Eastleigh

# **Service Supply Statement**







## **Document Control Sheet**

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Existing Utilities Plan 10440-SU-01

Consultation Zones and Safe Working Distances Plan 10440-SU-02





## **Executive Summary**

The proposed development lies south of Allington Lane. The north-east of the Site is bound by an existing railway line. The M27 is south of the proposed Site, with Moorgreen Road to the east of the Site. Quob Lane and Moorgreen Road run through the proposed development, which divides the proposed development.

Southern Water (SW) operate potable water distribution mains and foul water sewers, SSE operate High Voltage (HV) and Low Voltage (LV) networks, SGN operate Low Pressure (LP) and Medium Pressure (MP) gas mains and BT Openreach operate networks to the west and north-west along Allington Lane (with some assets potentially crossing the wider development Site). Additionally, SW operate potable water mains, SSE operate LV networks and BT Openreach operate networks to the north-east along Allington Lane. Along Quob Lane, which bisects the centre of the Site, and Burnetts Lane to the south-east, LP, LV, potable water mains and BT Openreach apparatus are shown.

The following assets are shown to potentially cross the proposed development site: A **Portsmouth Water (PW)** 42" potable water main through the south of the Site, a SGN Intermediate Pressure (IP) gas main through the south of the Site and a High Pressure (HP) gas main through the east of the Site, overhead 11kV networks and BT Openreach apparatus. Once at the detailed design stage, the companies which are affected by the proposed development can be contacted to determine whether any diversions and/or protection works of their existing apparatus are required.

Each incumbent company, along with the multi-utility companies GTC, TriConnex and Dragon Infrastructure, have been consulted in regards to supplying the proposed development. A summary of their indicative costings is provided below:

Utility Company	Service	Budget Estimate				
Southern Water	Potable Water	TBC				
Southern Water	Foul Sewerage	Initial assessment and discussions with SW has confirmed that additional modelling would be required to confirm their capability to supply the proposed development. However, SW has confirmed that a recent review of the design standards has been completed and adopted for all future modelling works. The modelling procedures are also been reviewed and are currently being updated. Pending this review, SW has temporarily withdrawn their Level 2 Sewerage capacity checks, with SW seeking to simplify their procedures to improve transparency.  Further options are currently being reviewed to progress the Site.				
SSE Electricity		Budget estimate of £3,200,000 to £3,750,000 to supply the proposed development and will install new 11kV ringed feeder from the primary substation at Hedge End, east of the proposed development.  £350,000 has been advised for any likely diversionary works on Site.				
SGN	Gas	Capacity within the Intermediate Pressure Network and have provided a budget estimate of £1,837,000 to supply the proposed development.				
GTC (Multi Utility)	Electricity and Gas	твс				
TriConnex (Multi Utility)	Potable Water, Electricity and Gas	TBC				
Dragon Infrastructure (Multi Utility)	Electricity and Gas	твс				

**Table 1a: Summary of Supply Budget Estimates** 

## Land South of Allington Lane, Eastleigh Service Supply Statement



This statement demonstrates that the Proposed Development has the potential to be supplied with normal network service supplies. Some localised, non-prohibitive reinforcements may be necessary along with protection or diversions where existing plant apparatus is affected. This will be confirmed once all enquiries have been completed by each respective utility company and once at the detailed design stage.



## 1 Introduction

- 1.1 Brookbanks Consulting Limited is appointed by Hallam Land Management Ltd to complete a Service Supply Statement for a proposed mixed use development at Land South of Allington Lane, Eastleigh.
- 1.2 The objective of the study is to demonstrate that the development proposals may adequately be provided with service supplies and to identify the outline requirement for any necessary reinforcements to existing networks.
- 1.3 This report presents the findings of the study and specifically addresses the following issues:
  - Existing network apparatus
  - Supply requirements for the Proposed Development
  - Consultations with the incumbent supply network operators
  - Development of outline proposals to supply the Proposed Development.

## 2 Background Information

#### **Location & Details**

- 2.1 The proposed development lies south of Allington Lane. The north-east of the Site is bound by an existing railway line.

  The M27 is south of the proposed Site, with Moorgreen Road to the east of the Site. Quob Lane and Moorgreen Road run through the proposed development, which divides the proposed development.
- 2.2 The Site location and boundary are shown below on Figure 2a:

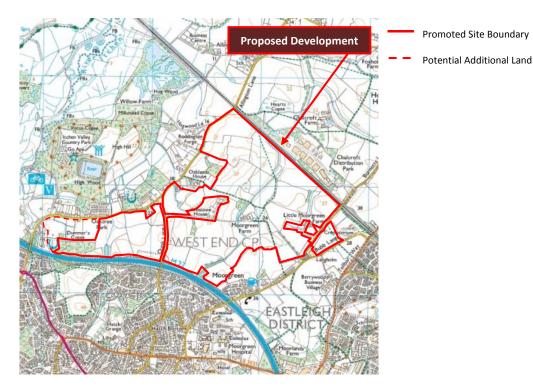


Figure 2a: Site Location



#### **Development Criteria**

2.3 The Proposed Development is to comprise up to 2,500 homes, 10,000m² of B1 Employment, two 2 Form Entry Schools and a Local Centre, which can deliver a broad range of house types, tenures and amenities to meet the future needs of the Local Planning Authority, Eastleigh Borough Council.

#### **Supply Loading**

2.2 The following loading assumptions in Table 2b, have been made to determine the Supply loadings to provide to the incumbent potable water, electricity and gas suppliers:

Development	Potable Water	Foul Water	Electricity	Peak Gas	Annual Gas	
Туре	Assumptions	Assumptions	Assumptions	Assumptions	Assumptions	
2,500 Residential Dwellings	Daily Water Demand of 125I/person/day over an 18 hour day Peaking Factor of 3	Assuming 95% of the Potable Water Demand	2kW/Dwelling	23kW/Dwelling	17,000kWh/Dwelling	
B1 Employment	Daily Water Demand of 45I/person/day over an 8 hour day. Peaking Factor of 3	Assuming 95% of the Potable Water Demand	87W/m² 70W/m²		120kW/m²	
2 Form Entry School (and Additional 2FE School)	Daily Water Demand of 15I/person/day over an 8 hour day. Peaking Factor of 3	Assuming 95% of the Potable Water Demand	50W/m²	87W/m²	150kW/m²	
Local Centre	Using a Mix of Daily Water Demands of; 45l/person/day 7l/person/day 15l/person/day over a 12/10/8 hour day. Peaking Factor of 3	Assuming 95% of the Potable Water Demand	Using a Mix of; 160W/m <sup>2</sup> 225W/m <sup>2</sup> 87W/m <sup>2</sup> 50W/m <sup>2</sup>	Using a Mix of; 100W/m <sup>2</sup> 250W/m <sup>2</sup> 70W/m <sup>2</sup> 87W/m <sup>2</sup>	Using a Mix of; 105kW/m <sup>2</sup> 370kW/m <sup>2</sup> 120kW/m <sup>2</sup> 87kW/m <sup>2</sup>	

**Table 2b: Supply Loading Assumptions** 

2.3 Following the assumptions made above, Table 2c outlines the supply loadings which have been provided to each incumbent utility company (Southern Water, SSE and SGN) in order for them to confirm whether they have capacity in their existing network to supply the proposed development.



Development Type (Area)	Peak Potable Water Demand (I/s)	Peak Foul Water Demand (I/s)	Electricity Demand (kVA)	Peak Gas Demand (kWh)	Annual Gas Demand (kWh)	
2,500 Residential Dwellings	33.28	31.61	5,000	57,500	42,500,000	
B1 Employment	3.91	3.71	870	700	1,200,000	
2 Form Entry School	0.87	0.82	138	239	412,500	
Additional 2FE School	0.87	0.82	138	239	412,500	
Local Centre	1.41	1.36	300 289		420,000	
Total	40.34	38.32	6,446	58,967	44,945,000	

**Table 2c: Supply Loadings** 

#### **Sources of Information**

2.4 The following bodies have been consulted whilst completing this study:

•	Southern Water	-	Potable Water
•	Southern Water	-	Foul Water Sewerage
•	SSE	-	Electricity
•	SGN	-	Gas
•	BT Openreach	-	Telecommunications
•	Sam Knows Website	-	Broadband Availability
•	Multi Utility Company – TriConnex	-	Potable Water, Gas and Electricity, Fibre
•	Multi Utility Company – GTC	-	Gas and Electricity
•	Multi Utility Company – Dragon Infrastructure	-	Gas and Electricity

## 3 Water Supply

#### **Existing Conditions**

- 3.1 **Southern Water (SW)** has been consulted regarding the location and capacity of their existing network within the vicinity of the Site. Existing details of their water supply network has been provided and transferred to a composite existing services plan, which is contained in the Appendix.
- 3.2 SW operate 15" CI and 400mm DI potable water mains west and north of the proposed development along Allington Lane. A potable water main is also shown along Quob Lane which bisects the proposed development. A 4" CI and a 400mm Di/15" CI potable water main is shown along Moorgreen Road to the south-east of the proposed development.
- 3.3 In addition SW operate potable water mains south of the proposed development along individual roads supplying the proposed development.
- 3.4 **Portsmouth Water (PW)** also operate a 42" potable water main which is shown to run across the south of the proposed development from west to east.



#### **Supply Loading**

To assist Southern Water in their capacity assessment of their existing network, a total Peak Clean Water Demand of 40.34l/s was provided. Further details of the supply loadings and assumptions are outlined in Tables 2b and 2c.

#### **Network Requirements**

3.6 An enquiry has been made to Southern Water to determine their requirements to supply the proposed development with potable water. SW are currently assessing their network.

#### **Diversions - onsite**

- 3.7 A potable water main operated by SW is shown along Quob Lane which bisects the proposed development along with mains which cross the proposed development off Allington Lane in the north-west. Once confirmed at the detailed design stage, SW could be contacted to confirm whether any necessary diversions will be required.
- 3.8 Additionally PW 42" potable water main is shown to run across the proposed development. An enquiry has been made to PW to obtain any associated easements for this main.

#### Diversions - offsite

3.9 SW operate assets within close proximity of the proposed development, along Allington Lane to the north and Burnetts Lane/Moorgreen Road to the south-east and once confirmed at the detailed design stage, SW could be contacted to confirm whether any necessary diversions will be required

## **Regulatory Background**

- 3.10 The introduction of the Water Act 2003 has:
  - Formalised the procedures for developers wishing to complete self-lay schemes through multi-utility businesses.
  - Implemented revised financial procedures, being more developer focused by offsetting capital costs of infrastructure against supply revenue.
- 3.11 The result is that the provision of water and drainage infrastructure for new developments is now cheaper.
- 3.12 Under current regulations, the new off-site and on-site infrastructure can be implemented by multi-utility contractors, with the exception of a small element of non-contestable works where the new supply is connected to the existing network. Alternative asset owning businesses are able to implement and supply a strategic area through an Inset Appointment. Alternative asset owners normally procure the water supply through a bulk supply contract with the incumbent business or by an alternative means of supply such as a borehole.
- 3.13 The Water Act 2003 allows two principal options in terms of financial arrangement between the developer and water infrastructure business. Both take into account the revenue earned by the business as a result of the new supplies.
  - The Discounted Aggregate Deficit (DAD) / Commuted Sum method calculates the cost of implementing and funding the required infrastructure over a ten year period. The year on year income from new supplies is then offset against the funding, which when brought forward to an equivalent present day cost, identifies the contribution attributed to the developer. The mains are then installed by the water infrastructure company.



- The Asset Value method, whereby the mains may be laid by a multi-utility contractor, calculates the year on year income generated from the water supply, which is then paid back to the developer on the adoption of the mains. As a multi-utility contractor generally completes the work at a lower cost than the water supplying company, the Asset Payment method can often be the most cost effective.
- 3.14 The procedures outlined in the Water Act 2003 should result in all water businesses (including the incumbent operator) giving similar rebates through either the Asset Value or Commuted Sum procedures. The Asset Value method generally offers a cheaper scheme for site developers wishing to procure services through a multi-utility contract.

## 4 Foul Water Sewerage and Storm Water Drainage

#### **Existing Conditions**

- 4.1 **Southern Water (SW)** has been consulted regarding the location and capacity of their existing sewerage network within the vicinity of the Site. Existing details of their foul network has been provided and transferred to the composite existing services plan, contained in the Appendix.
- 4.2 SW operate Foul Water, Surface Water and Foul Rising Mains within the vicinity of the proposed development.
- 4.3 SW operate a 300mm CP Foul Water main along a track crossing the west of the proposed development. A Foul Water 225mm VC / 300mm CP Foul Water main is shown to the west and north of the proposed development along Allington Lane. An additional 150mm SI Foul Water main is shown to the south-east along Moorgreen Road.
- 4.4 SW operate Foul Water, Surface Water and Foul Rising Mains south and south-east of the proposed development along individual roads supplying the adjacent residential dwellings. A Foul Rising Main is operated by SW crossing the M27.

## **Supply Loading**

4.5 To assist Southern Water in their capacity assessment of their existing foul network, a total Foul Water demand for the site of 38.32 l/s was provided. Further details of the supply loading and assumptions are outlined in Tables 2b and 2c.

## **Network Requirements**

- Initial assessment and discussions with SW has confirmed that additional modelling would be required to confirm their capability to supply the proposed development. However, SW has confirmed that a recent review of their design standards has been completed and adopted for all future modelling works. The modelling procedures have also been reviewed and are currently being updated. Pending this review, SW has temporarily withdrawn their Level 2 Sewerage capacity checks, as they are seeking to simplify their procedures to improve transparency.
- 4.7 However, further options are currently being reviewed to progress the Site.
- There are two sewage treatment works within 3km of the Proposed Development area and to the west of the River Itchen. The closest is Eastleigh Sewage Treatment Works approximately 2.5km north of the site, whilst Portswood Waste Water Treatment Works is situated approximately 2.9km south-west of the Site.

## Diversions – onsite

4.9 An existing Foul Water main operated by SW is shown to cross the east of the proposed development. Once confirmed at the detailed design stage, SW could be contacted to confirm whether any necessary diversions will be required.



#### Diversions - offsite

4.10 SW operate Foul Water mains along Allington Road to the north-west and west of the proposed development. Once confirmed at the detailed design stage, SW could be contacted to confirm whether any necessary diversions will be required.

#### **Storm Drainage**

4.11 The means to discharge storm water drainage on site will be dealt with via Sustainable Drainage Systems (SuDS) and therefore no connection to Southern Water storm water drainage is proposed. Further information can be provided within a Flood Risk Assessment report.

## 5 Electricity Supply

## **Existing Conditions**

- 5.1 **Scottish and Southern Energy (SSE)** has been consulted regarding their existing network locations. Existing details of the electricity supply network have been provided and transferred to a composite existing services plan, which is contained in the Appendix.
- 5.2 SSE operate existing 11kV overhead lines which are shown to cross the proposed development in the north-west, centre and east.
- 5.3 SSE also operate High Voltage (HV) and Low Voltage (LV) networks along Allington Lane west and north of the proposed development. LV networks are shown to the south-east of the proposed development along Moorgreen Road.
- 5.4 Additionally, SSE operate HV and LV networks to the south of the proposed development, along individual roads, supplying the residential dwellings.

#### **Supply Loading**

To assist SSE in their capacity assessment of their existing network, a total Electricity Demand for the Site of 6,446kVA was provided. Further details of the supply loading and assumptions are outlined in Tables 2b and 2c.

### **Network Requirements**

- 5.6 SSE has provided a budget estimate of £3,200,000 to £3,750,000 to supply the proposed development.
- 5.7 SSE will install new 11kV ringed feeder from the primary substation at Hedge End, east of the proposed development, to service the entire development form the local network.
- 5.8 SSE have also allowed for £350,000 for any likely diversionary works on Site.

#### Diversions - onsite

5.9 SSE operate an existing HV overhead networks which cross the proposed development in a number of locations. Once at the detailed design stage, SSE could be contacted to confirm whether any necessary diversions will be required. However SSE have provided a budget indication of £350,000 for likely diversionary works of their apparatus, including the HV overhead cables.



#### Diversions - offsite

5.10 SSE operate HV and LV cables along Allington Lane to the west and north-west, with LV cables along Allington Lane in the north-east. Once at the detailed design stage, SSE could be contacted to confirm whether any necessary diversions will be required.

#### **Regulatory Background**

5.11 Competition in the electrical market is now reasonably mature and a developer is free to procure third party DNOs to provide an embedded network, or indeed multi-utility / third party installations. The likes of Metropolitan and GTC take a holistic view in putting together infrastructure reinforcements, site distribution and supply packages and off-set the costs with anticipated future revenue through the transmission and supply of service to give a better financial arrangement and single point of responsibility for the developer.

## 6 Gas Supply

#### **Existing Conditions**

- **SGN** has been consulted regarding the location of their existing network in the vicinity of the Site. Existing details of the gas supply network have been provided and transferred to composite existing services plan, which is contained in the Appendix.
- 6.2 SGN operates an Intermediate Pressure (IP) gas main crossing the south of the proposed development, along with a High Pressure Gas main crossing the east of the proposed development.
- Additionally, SGN operates a Medium Pressure (MP) gas main to the west of the propose development along Allington Lane. SGN operate Low Pressure (LP) gas mains to the west and north-west along Allington Lane, and to the east along Moorgreen Lane. Also a LP gas main shown along Quob Lane which bisects the Site, and continues along an access road.
- 6.4 Further LP gas mains are shown to the south of the proposed development, along individual roads supplying the adjacent residential dwellings.
- 6.5 **ES Pipelines** operate a LP gas main to the south-east of the Site off the M27. **GTC** also operate LP gas mains south of the proposed development off Quob Lane.

#### **Supply Loading**

To assist SGN in their capacity assessment of their existing network, a Total Peak Gas Demand for the Site of 58,967kWh and an annual gas demand of 44,945,000kWh was provided. Further details of the supply loading and assumptions are outlined in Tables 2b and 2c.

## **Network Requirements**

- 6.7 SGN confirm that there is sufficient capacity in its Intermediate Pressure network to accommodate the proposed development. SGN has provided a budget estimate of £1,837,000 to supply the proposed development.
- 6.8 SGN will install appropriately sized gas infrastructure to suitable locations.



#### **Diversions/Consultation Distances – onsite**

- 6.9 SGN operate an IP crossing the south of the proposed development, and a HP gas main crossing the east of the proposed development. SGN has advised that the IP gas main has an easement of 6 metres (3 meters either side of the gas main). Consultation with the HSE has confirmed that the HP gas main which crosses the east of the Site, is the Lordswood/Purbrook Pipeline, which has an Inner Zone of 3m and an Outer Zone of 165m either side of the pipeline.
- 6.10 Once at the detailed design stage, SGN may be contacted to confirm whether any necessary diversions or protective measures of their existing assets are required.

#### Diversions - offsite

6.11 SGN operate MP gas mains and LP gas mains along Allington Lane and LP gas mains along Quob Lane and the access road bisecting the Site. Once at the detailed design stage, SGN may be contacted to confirm whether any necessary diversions of their existing assets are required.

#### **Regulatory Background**

6.12 Early deregulation in the gas infrastructure market has led to a competitive environment. Third party shippers are permitted to offset the capital cost of infrastructure against the income generated from conveying the gas which may reduce future development costs.

#### 7 Telecommunications

#### **Existing Conditions**

- 7.1 The main incumbent telecommunications provider is **BT Openreach**. An extract from their asset plans is shown within the Appendix, which shows an existing network to potentially cross the centre of the Site off Quob Lane (and the along the access road), which divides the Site and along Burnetts Lane to the south-east, which also divides the Site. BT Openreach also operate apparatus along Moor Green Road to the east of the proposed development and along Allington Lane to the west, north and north-east of the Site.
- 7.2 BT Openreach also operate apparatus south and north-east of the proposed development along individual roads supplying the residential dwellings and commercial areas respectively.
- 7.3 Virgin Media are still to confirm their location for their apparatus.

## **Supply Requirements**

7.4 A development of this nature will require a suite of communication services, typically being:

Fibre to the Premises (FTTP) technology, where the fibre runs all the way to the home or business, from the local exchange is being deployed in certain areas. FTTP will offer the top current download speed of 330Mbp for residential properties and 1Gbps for commercial

properties. This is labelled 'Ultrafast Broadband' by BT Openreach.

ADSL: Asymmetric Digital Subscriber Line (ADSL) is the basic broadband service delivered over the

traditional copper network and predominately in use in rural areas offering up to 24Mbps



downloads, and up to 2.5Mbps upstream. This is adversely affected by distance from the exchange.

**Cable Television:** 

Cable television services provide an option for the proposed domestic dwellings to replace the need for satellite dishes. Cable Television is provided by Virgin Media, BT (BT Vision) and GTC.

FTTC:

Fibre to the Cabinet (FTTC) relies on the existing copper network between the telephone cabinets but is then fed by fibre optic cables to the local exchange. This reduces the loss experienced over the copper network. Download speeds offered can be up to 80Mbps.

LLU:

Local Loop Unbundling (LLU) is the process of opening up a telephone exchange so that it can be used by a number of different broadband providers. These broadband providers are then able to use connections from the telephone exchange through to the customer's homes to deliver home broadband.

ISP:

Internet Service Providers (ISP) supplies the end user with internet access services over the telecom network. The speeds offered by the ISP are restricted by the physical network. The available ISPs delivering services over FTTP are currently limited but will increase as it is rolled out to more customers to increase the market.

#### **Network Requirements**

- A Connectivity Assessment can be applied for through BT Openreach to confirm supply requirements for the proposed development. BT Openreach advise the ideal time for this request is at land purchase stage. The proposed development is covered by the Moorhill exchange. In addition to BT Openreach, ADSL, Virgin Media an initial review has identified the following LLU operators are present in the Moorhill exchange: Sky and Talk Talk (CPW) and Vodafone.
- 7.6 The Moorhill exchange (approximately 1.7km south of the proposed development) can offer FTTC in some areas.

## Diversions – onsite

7.7 BT Openreach operate apparatus which cross the proposed development in the centre of the Site, and potentially off Quob Lane. Once at the detailed design stage, BT Openreach and Virgin Media may be contacted to confirm whether any necessary diversions of their existing assets are required.

## **Diversions –offsite**

7.8 BT Openreach own apparatus to the west of the Site along Allington Lane, along Quob Lane and to the south-east along Moorgreen Road and Burnetts Lane. Once at the detailed design stage, BT Openreach and Virgin Media may be contacted to confirm whether any necessary diversions of their existing assets are required

## **Regulatory Background**

7.9 BT Openreach is the incumbent national communications business throughout most of the country, with the exception of K-Com in the Hull area. They own and operate the majority of fibre and copper telecoms networks in the country.



- 7.10 With BT Openreach controlling the existing cables feeding residential development, and the exchange (what is known as the 'local loop' or 'last mile'), they have maintained a dominant position in controlling the communications sector.
- 7.11 The industry regulator, Ofcom has completed much work in unbundling the local loop and bringing competition into the residential market. Following this deregulation, Virgin Media, TalkTalk and Vodafone are undertaking major investment to place switch equipment into BT's existing exchanges and hence allow direct access to their network. This system, known as Carrier Pre-Selection is becoming increasingly popular, although wholesale line provision down at local loop level, within the residential market, has yet to develop. Accordingly, BT or local cable franchise cable operators are the prime source of network connections on residential sites.
- 7.12 Virgin Media and GTC offer rival options to supply telecoms to residential developments, although the choice of alternative ISPs is more restricted than via the BT Openreach network.

## 8 Multi Utility Companies

8.1 The Multi Utility Companies **GTC, TriConnex and Dragon Infrastructure** have been consulted to provide a budget estimate for supplying the proposed development with gas and electricity (and Potable Water if possible).

#### **Supply Loading**

8.2 The same gas loading assumptions that were provided to SGN and electrical loading assumptions that were provided to SSE have been provided to GTC, TriConnex and Dragon Infrastructure in order for them to provide their connection budget estimate costs.

#### **Network Requirements**

#### GTC

8.3 GTC are still currently assessing their capability in supplying the proposed development with electricity and gas.

#### **TriConnex**

8.4 TriConnex are still currently assessing their capability in supplying the proposed development with electricity and gas and potable water.

## **Dragon Infrastructure**

8.5 Dragon Infrastructure are still currently assessing their capability in supplying the proposed development with electricity and gas.

## 9 Service Supply Competition

9.1 The traditional procurement route, up until recently, had been to provide service supplies to a new development through a local network operator. With the incumbent companies having somewhat of a monopoly, competition in the market was poor.



- 9.2 However, following deregulation of the service supply networks, through the likes of Ofgem, Ofcom and Ofwat, independent network operators have been able to enter the market and provide new service supplies to developments.
- 9.3 Companies such as GTC and Connect take a holistic view in putting together infrastructure reinforcements, site distribution and supply packages and off-set the costs with anticipated future revenue through the transmission and supply of service to give a better financial arrangement and single point of responsibility for the developer.
- 9.4 These businesses use a multi-utility approach to implement the infrastructure. The independent companies are still regulated by the relevant office of regulation and subsequently asset owners must:
  - Ensure that the installed network meets regulated standards
  - Design to an operating lifetime of 40+ years
  - Manage a return on their investment
  - Ensure that the existing network performance is not compromised
- 9.5 Throughout this document a review has been completed for the provision of service supply infrastructure at the site through the local network operators. This approach provides a good indication as to the likely upgrading requirements for the local infrastructure, but at this stage, does not demonstrate a competitive cost for services procurement.
- 9.6 Multi-utility companies provide significant investment to the provision of services at a development based on a whole life financial model, considering revenue from supply conveyance. Due to these investments, large reductions can be achieved to the capital cost for the provision of services at a site.
- 9.7 A development of this size has the potential to benefit a great deal from the financial investment of companies such as Connect and GTC. As such independent companies may be utilised to provide final network supplies for the Site.
- 9.8 This report summarises the details relating to the current network conditions outlining the requirements for reinforcements and provision of supply through the existing network.

## 10 Summary

- 10.1 This Services Statement has demonstrated that the proposed development on the Site has the potential to be supplied with normal network service supplies, without prohibitive reinforcements to the existing networks.
- However, some localised, non-prohibitive reinforcements may be necessary together with protections or diversions where existing plant is affected by the proposals. This will be confirmed once all enquiries have been completed by each respective utility company.
- 10.3 Table 10a below outlines the supply requirements for each incumbent company, along with the multi-utility company:



Utility Company	Service	Budget Estimate
Southern Water	Potable Water	TBC
Southern Water	Foul Sewerage	Initial assessment and discussions with SW has confirmed that additional modelling would be required to confirm their capability to supply the proposed development. However, SW has confirmed that a recent review of the design standards has been completed and adopted for all future modelling works. The modelling procedures are also been reviewed and are currently being updated. Pending this review, SW has temporarily withdrawn their Level 2 Sewerage capacity checks, with SW seeking to simplify their procedures to improve transparency.  Further options are currently being reviewed to progress the Site.
SSE	Electricity	Budget estimate of £3,200,000 to £3,750,000 to supply the proposed development and will install new 11kV ringed feeder from the primary substation at Hedge End, east of the proposed development.  £350,000 has been advised for any likely diversionary works on Site.
SGN	Gas	Capacity within the Intermediate Pressure Network and have provided a budget estimate of £1,837,000 to supply the proposed development.
GTC (Multi Utility)	Electricity and Gas	ТВС
TriConnex (Multi Utility)	Potable Water, Electricity and Gas	TBC
Dragon Infrastructure (Multi Utility)	Electricity and Gas	TBC

**Table 10a: Summary of Supply Budget Estimates** 

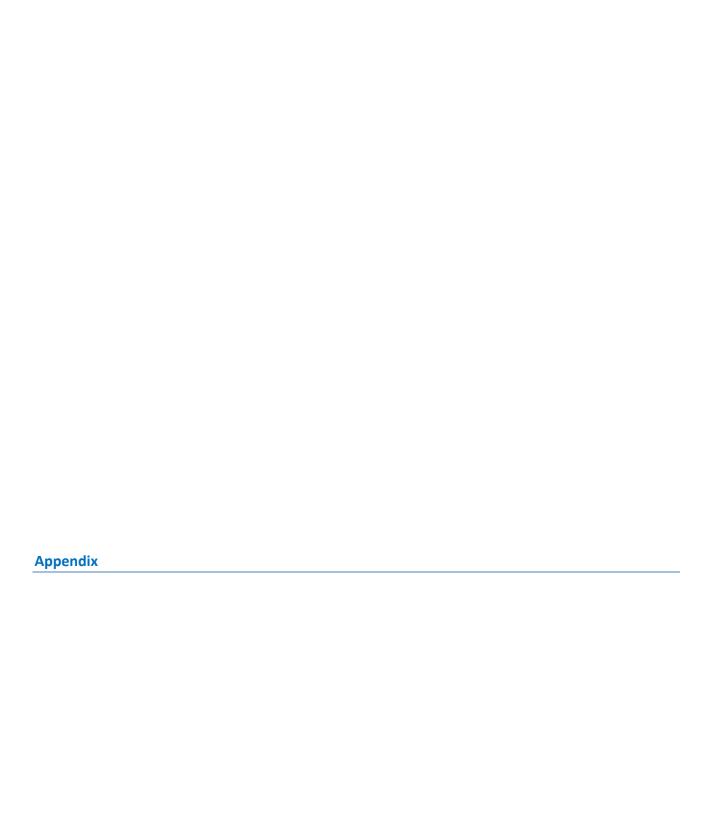
### 11 Limitations

- 11.1 The conclusions and recommendations contained herein are limited to those given the general availability of background information and the planned usage of the Site.
- 11.2 Third Party information has been used in the preparation this report, which Brookbanks Consulting Ltd, by necessity assumes is correct at the time of writing. While all reasonable checks have been made on data sources and the accuracy of data, Brookbanks Consulting Ltd accepts no liability for the same.

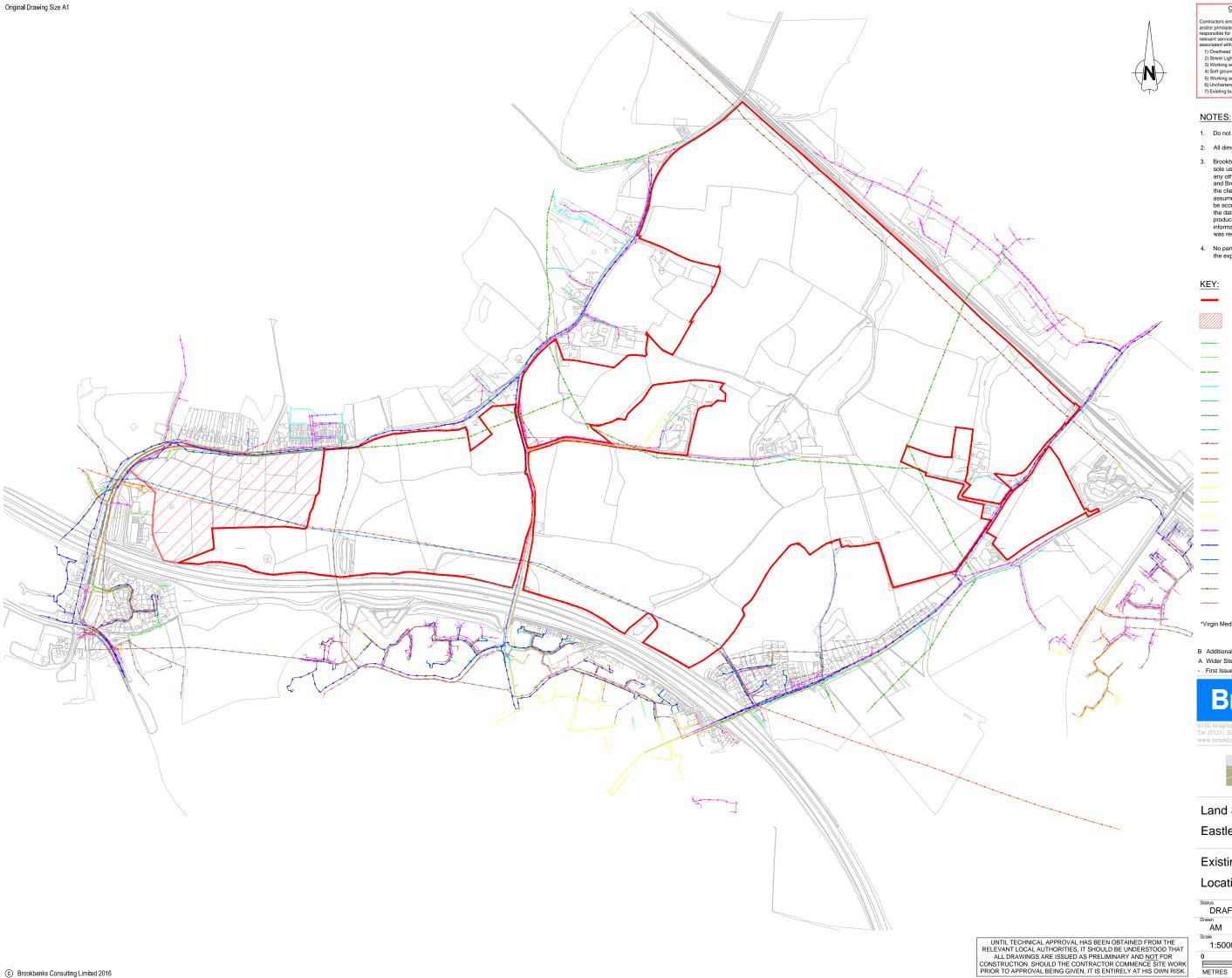


- 11.3 Existing network appraisals and proposed reinforcements are based on current infrastructure. Ongoing load growth will occur that may feasibly affect network availability. It is therefore necessary to monitor and review the existing networks capacity regularly.
- 11.4 The benefits of this report are provided solely to Hallam Land Management Ltd for the proposed development on the Site only.
- 11.5 Brookbanks Consulting Ltd excludes third party rights for the information contained in the report.









Construction Design and Management (CDM)

Key Residual Risks

Contractors entering the site should gain permission from the relevant land owners and/or principle contractor working on site at the time of entry. Contractors shall be responsible for carrying out their own risk assessments and for liaising with the relevant services companies and authorities. Listed below are Site Specific key risks associated with the project.

- 1. Do not scale from this drawing
- 2. All dimensions are in metres unless otherwise stated.
- 3. Brookbanks Consulting Ltd has prepared this drawing for the sole use of the client. The drawing may not be relied upon by any other party without the express agreement of the client and Brookbanks Consulting Ltd. Where any data supplied by the client or from other sources has been used, it has been assumed that the information is correct. No responsibility can be accepted by Brookbanks Consulting Ltd for inaccuracies in the data supplied by any other party. The drawing has been produced based on the assumption that all relevant information has been supplied by those bodies from whom it
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Site Boundary

Wider Site Boundary

High Voltage (SSE)

High Voltage Assumed Route (SSE)

Low Voltage (SSE)

Low Voltage Assumed Route (SSE)

Low Voltage Service Route (SSE)

Low Voltage Overhead (SSE) High Pressure Gas (SGN)

Intermediate Pressure Gas (SGN)

Medium Pressure Gas (SGN)

Low Pressure Gas (SGN)

Low Pressure Gas (GTC)

Low Pressure Gas (ESPipelines)

BT Openreach

Potable Water (Southern Water)

Potable Water (Portsmouth Water)

Foul Water Sewer (Southern Water)

Rising Main (Southern Water)

Surface Water Sewer (Southern Water)

B Additional Utilities Added

A Wider Site Boundary Added

AM LW PAB 02.11.16

AM LW PAB 16,11,16

# **Brookbanks**



## Land South of Allington Road Eastleigh

# **Existing Utilities**

# Location Plan

Status							tus Date		
DRAFT						October 2016			
Drawn		Chec	ked			Dat	е		
AM			LW			19	19.10.2016		
Scale		Num	Number			Rev	,		
1:5000m			10440-SU-01		В				
0	100	20	00	30	00	40	00	500	
METR	ES								



