



HARNISS
CONSULTING

UTILITY SERVICES REPORT

for

**THE FORMER ASCOT ARMS, CENTRAL AVENUE,
GRAVESEND, DA12 5AW**

On behalf of

AVERY HEALTHCARE GROUP (AVERY)

Harniss Consulting

23 Paterson Road
Wellingborough
NN8 4BZ

Tel: 01933 656850

email: info@harniss.co.uk

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1 Introduction

The purpose of this report is to provide an overview of the existing utility services around the site boundary of the former Ascot Arms, Central Avenue, Gravesend, DA12 5AW and to explore the feasibility of new services for the proposed redevelopment. The development proposals consist of the design and construction of a new 62-bedrom Care Home (Use Class 2) for Avery Healthcare Group (Avery).

This report has been prepared to review the existing service arrangements across and within the vicinity of the site to establish the affects that these may have on the current proposals and any potential diversions that may be required.

Contact has been made with the various key utility supply companies and network operators who in-turn have provided their record information for the purposes of this review. It should be noted that these record maps provide an indication of services in and around the site but not always an accurate reflection of what is installed and as such the findings herein will need to be validated by way of physical survey work.

In all instances where proximity of services is identified as being 'present' the precise locations, i.e., dimensions, are not given as the general practice is, they identify 'approximate' positions only.

An initial load assessment has been undertaken and submitted to the relevant authority for the purpose of confirming network capacity or possible network reinforcement/upgrades, where required, to serve the proposed development for gas, clean water & electricity.

This report has been produced following a desktop study of utility record information.



Picture 1: Proposed Site Plan – Courtesy of TDC Architects

2 Existing Utility Services

The records of the existing services have been obtained from the respective network operator, which are appended to this report.

The key finding from the desk top feasibility study of utility provisions in and around the proposed site is that all major services are local to the site and available for connection, however, please refer to latter sections of this report for detail on the capacity checks of the adjacent networks.



Picture 2: Image of site – Courtesy of Google Maps

2.1 Electrical Services

The record information provided by UKPN shows an existing connection to the former Ascot Arms. This will be disconnected and removed by the demolition contractor.

UKPN records indicate the existing 500kVA sub-station currently positioned on the site boundary off Aintree Close is at its absolute maximum in terms of capacity. There is no available capacity elsewhere on the LV network.

UKPN have advised they cannot upgrade the existing 500kVA transformer as it serves a large area of housing and they rely on the power. Therefore, they propose to build a new brick built sub-station sited next to the existing one with suitably sized transformer to cater for the housing plus the new Care Home.



Picture 3 – Image of existing sub-station – Courtesy of UKPN

Upon completion of the new sub-station the existing sub-station will be decommissioned, removed and landscape reinstated. The works to establish a new sub-station will require diversion of existing HV mains and LV mains to houses and street lighting.

For the Care Home the anticipated maximum demand is 212kVA. UKPN will provide a 600A rated heavy duty service cut out (fused at 400A) incorporating a CT metering chamber positioned in purpose-built cupboard on the side of the cycle store or in the plant room on the south west elevation.

Excavation will be required to the private land and highway resulting in road closure and standard traffic management once a permit has been given by the local authority.

2.2 Potable Water Services

The record information provided by Southern Water shows an existing connection to the former Ascot Arms. This is to be disconnected and removed by the demolition contractor.

Upon review of the Southern Water record maps there is an existing 4" main pipe running along Central Avenue and down Ascot Road on the opposite side of the road. There does not appear to be a connection or main local to the site so it is anticipated that a new water main and road closure will be required to service the proposed Care Home development.

There appears to be fire hydrants on both Ascot Road and Central Avenue. Record maps indicate these are within 100m of the new development however existing road layouts may prevent them from being used. Fire hydrants will not be required if we satisfy BOTH Building Regulation 16.8a and 16.8b of Approved Document B. Where this cannot be met consideration will be given to providing a single hydrant near to the main entrance to the Care Home.

Excavation will be required to the private land and highway resulting in road closure and standard traffic management once a permit has been given by the local authority.

2.3 Natural Gas Service

The record information provided by Southern Gas appears to show no connection to the former Ascot Arms.

Southern Gas record information identifies a gas main along Aintree Close on the opposite side of the road parallel to the site boundary.

A new gas service will be taken from the existing low pressure main running in Aintree Close to satisfy a peak hour load of 804726kWh per annum to serve the Care Home. The termination of the new gas service will be in a suitable meter housing in hard landscape adjacent to the proposed Cycle Store on the west elevation.

Excavation will be required to the private land and highway resulting in road closure and standard traffic management once a permit has been given by the local authority.

2.4 Telecommunications

Upon review of record information from BT Openreach Ltd, it identifies existing telecommunications services running in Central Avenue and Ascot Road.

There are several live boxes along both Central Avenue and Ascot Road. The BT service in Ascot Road terminates into a kiosk that is positioned on the edge of the footpath by the entrance to the new Care Home. We are not expecting to move this therefore it will remain in its location.

The new service into the Care Home will originate from the live service either in Central Avenue or from the kiosk located in Ascot Road.

Exact termination of existing services and a formal application is needed to determine the viability and cost of the providing telecommunications infrastructure to the proposed development, but from the information reviewed it looks feasible that the necessary supplies can be provided.

2.5 Recommended Surveys

Reviewing the record information available, it is anticipated the impact to the development from existing surrounding utilities is likely to be minimal.

We would advocate slit trenches being formed to provide an accurate detail of service details and their depths once possession of the site is taken to ensure the full extent of disconnections, diversions and or lowering of services is determined.

3 New Supply Connections

Developers' applications have been submitted to provide new supplies to the site for gas, water and electric to the relevant network operators. These developers' enquiries will provide a conclusion to an initial assessment of the available capacity within each network, at the time of application, to meet the demands of the proposed development.

Service	Authority	Detail of Service Requested	Current Status	Quotation Value
Electric	UKPN	New 212kVA supply, diversion of existing HV and LV mains to new sub-station	Awaiting quotation	£125,000*
Gas	Southern Gas	New gas main to provide peak load of 804726kWh per annum	Quotation received 25/02/2021 – valid until end of April 2021	£16,505.32
Water	Southern Water	New potable water main to provide 1.54l/s including sprinkler load	Awaiting quotation	£20,000**
Fire Hydrant Main	Southern Water	New main to a single fire hydrant subject to confirmation one is required (refer to section 2.2)	Awaiting quotation	£20,000**
Telecoms	BT Openreach	Provision of 2No 90mm GREY ducts	Awaiting quotation	£10,000**

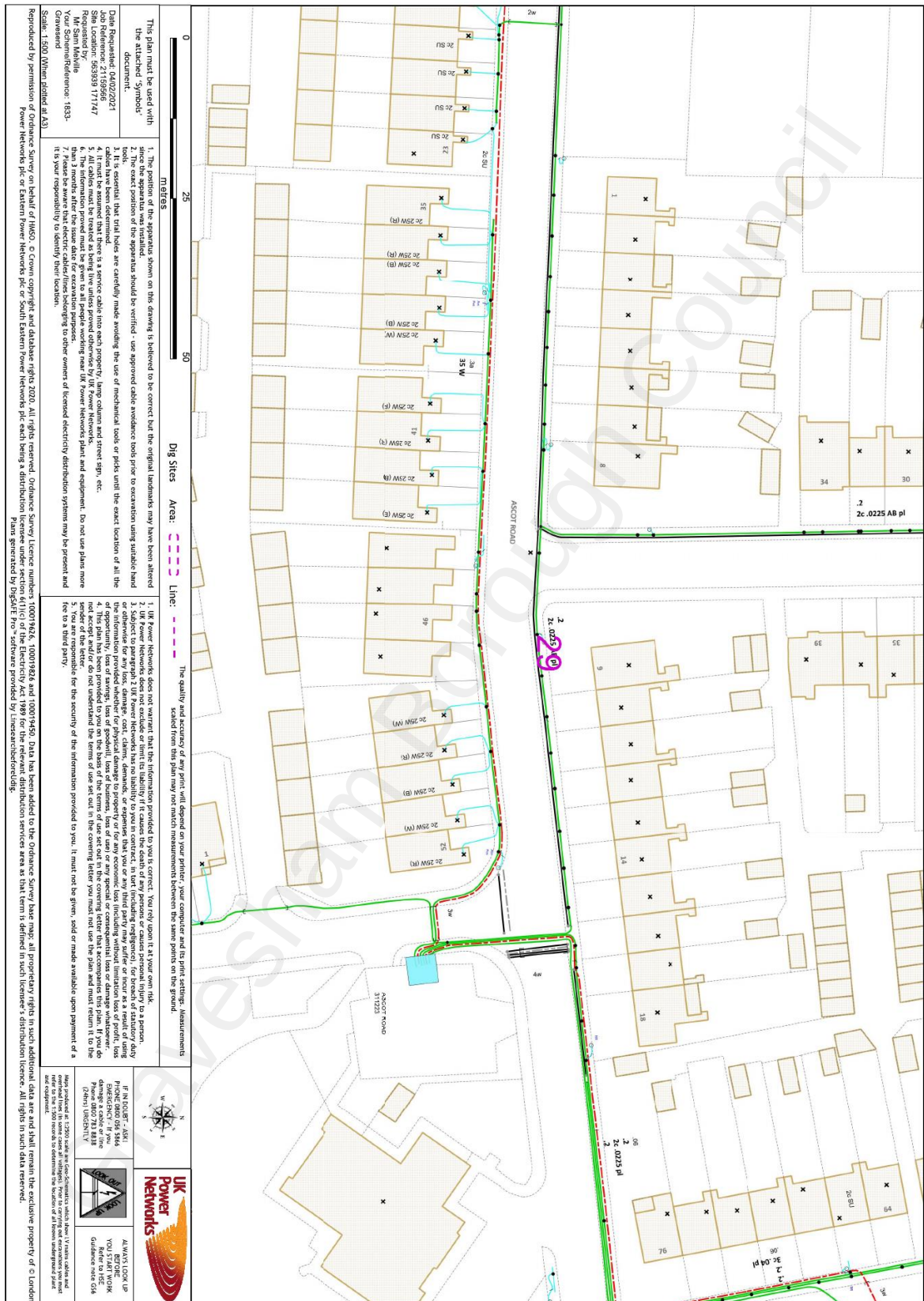
All quotation values include VAT.

Quotation values exclude on site excavation and reinstatement, underground ducting, concrete bases / plinths for supply authority enclosures and other builder's work. Disconnection and removal of existing services are also excluded.

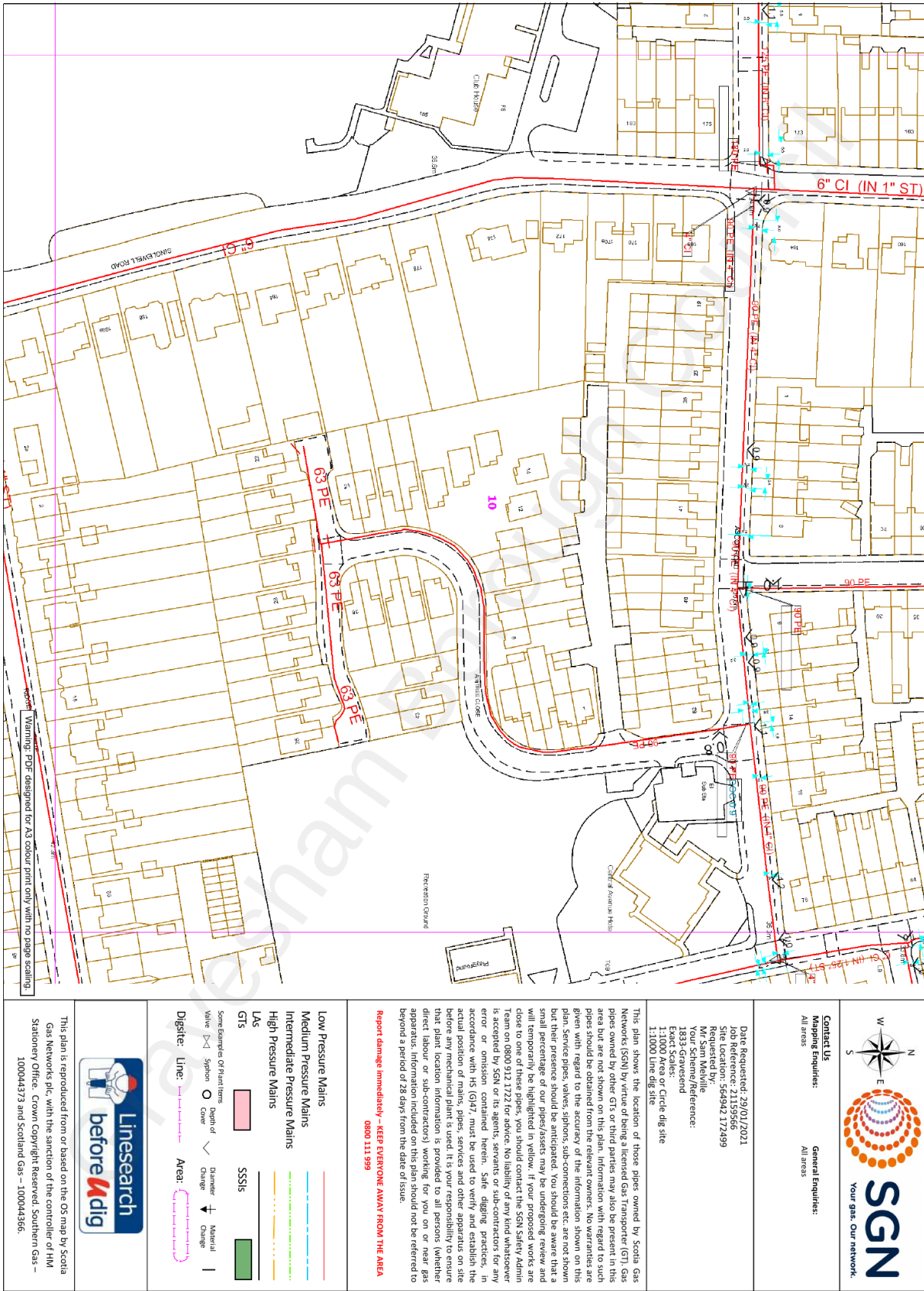
** denotes quote has been estimated based on similar sized projects with similar local infrastructure. This includes for decommissioning and removal of existing sub-station. Final price subject to change following firm quotation from the relevant supply authority and contractor.*

*** denotes quote has been estimated based on similar sized projects with similar local infrastructure. Final price subject to change following firm quotation from the relevant supply authority and contractor.*

4 Appendix A – Electricity Record Map



5 Appendix B – Gas Record Map



Avery, Gravesend



7 Appendix D – BT Openreach Record Map

