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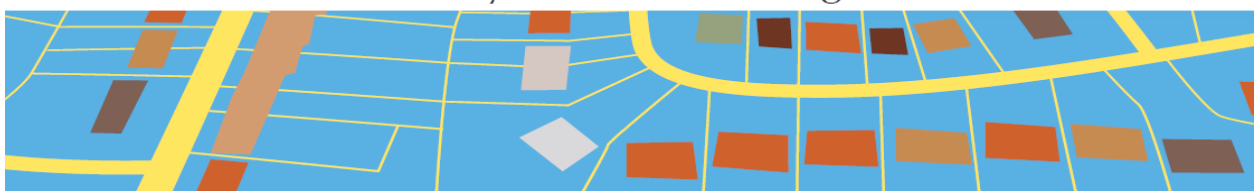
HOLT ROAD, ROSSETT PROPOSED RESIDENTIAL DEVELOPMENT UTILITY SERVICES INFRASTRUCTURE

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HOLT ROAD, ROSSETT – RESIDENTIAL DEVELOPMENT

UTILITY SERVICES INFRASTRUCTURE

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HOLT ROAD, ROSSETT – RESIDENTIAL DEVELOPMENT

UTILITY SERVICES INFRASTRUCTURE

EXECUTIVE SUMMARY

The proposed development site area has available existing Utility Company statutory electrical, gas, water and telecommunication network services local to the site.

The existing electric, gas, water and telecommunications networks are all located close or within the Holt Road and Harwood's Lane highway zones, and consequently close to the proposed development site.

These utility services are considered capable of serving the proposed development, subject to the respective utility service network being extended to the site location and into the development.

In conclusion, the proposed development site is capable of being provided with mains electrical, gas, water and telecommunication utility services.

Refer to the respective sections of this report for greater detail of the existing utilities, their associated considerations and constraints and availability, including their respective record plans provided.

HOLT ROAD, ROSSETT – RESIDENTIAL DEVELOPMENT

UTILITY SERVICES INFRASTRUCTURE

Introduction

The scope of the site is at the edge of the Rossett community, being two areas bordering each of the north and south side of Holt Road, with the south area also bordering Harwood's Lane.

Residential development is proposed for each of the two site areas.

Refer Appendix A – Proposed Development Site Area

The scope and occupancy of the proposed development will require the connection of statutory utility company network supplies as part of the proposals.

Initial contact has been made and liaison undertaken with the respective statutory utility companies to determine:-

- The scope of their existing network distribution apparatus,
- Associated considerations and constraints,
- Their ability to serve the development.

EXISTING UTILITY NETWORKS

In the general locality of the proposed development, and specifically within the adjacent highways there are existing utility company supply networks.

A review of their record plans, has determined that these are understood to be:-

Electric: SP Energy Networks (SPEN), comprising:-

- 33kV High voltage (HV) overhead cables diagonally crossing the site area south of Holt Road, running in a southwest/northeast/ line, with two poles within the site area.
- LV overhead cables carried by posts, either just within the Holt Road highway zone or marginally within the south site area north boundary, routed close and parallel to Holt Road.
- LV overhead cable carried by posts, either just within the Harwood's Lane highway boundary, or marginally within the south site area south boundary, routed close and parallel to Harwood Lane.
- LV buried distribution within and serving the Trevalyn Way, West Way and Cromer Crescent existing housing to the west of the site areas.
- These existing housing areas are served from a HV ring main circuit crossing Holt Road very close to the site boundaries, with two substations in the locality,
 - Waverley Crescent ref 04/3757/002, and
 - Trevalyn Way, ref. 04/3757/010.
- 6.6/11kV HV overhead cables also are present close but beyond the south site area crossing Harwood's Lane in an east to west route.

Refer to Appendix B – SP Energy Network Electrical Record Plan

Gas: West & Wales Utilities (W&WU), comprising:-

- Low Pressure (LP) gas distribution pipes serve the existing adjacent housing community bordering the south site area only, being routed within the respective highway zones i.e. Trevalyn Way
- A 90 LP main is located within the highway zone of Chapel Lane, extending within approximately 100 metres of Holt Road, and 200 metres from the site's west boundary
- The existing housing north of Holt Road, being located on the west boundary of the north site area, is confirmed by W&WU as not supplied with network gas.

Refer to Appendix C – West & Wales Utility Gas Record Plan

Water: Dee Valley Water (DWW), comprising:-

- A 9" Asbestos Cement (AC) main and apparatus is routed within the north side of the Holts Road highway zone, extending along the whole length of the north and south site areas
- The existing housing north of Holt Road, being on the west boundary north site area is supplied by a 3" AC main.
- A 4" main (material unspecified) and apparatus is routed within the highway zone of Harwood's Lane.
- The existing housing south of Holt Road extending to Harwood's Lane, being on the west boundary of the south site area, is served by a 6" AC main, and inter-connects with the Holt Road network.

Refer to Appendix D – Dee Valley Water, Water Record Plans

Telecommunications: BT Openreach (BTOR)

- Cable ducts and chamber networks are located within the Holt Road highway zone containing multiple voice and data cabling.
- Cable ducts and chambers are located within Harwood's Lane highway zone, terminating at the southwest corner of the south site area.

Refer to Appendix E - BTOR Cable Duct & Chamber Record Plans

General

The specific location and routes of the existing services, whilst known in general terms from the respective Utility Company's record plans, will require to be accurately identified along their whole route where they may impact on proposed works. This will be achieved at the early design stages, through liaison with the respective Utility Company, consulting existing records, and the undertaking of specialist search and survey techniques

CONSIDERATIONS AND CONSTRAINTS

The existing utility services primarily extend within designated public and private highway zones, however where specific network apparatus extends into private land, these will likely be with formal agreements and/or easements/wayleaves.

Where utility services are within the public highway zones, these are secured by the Highway status.

The utility services which enter or may encroach on the proposed development site areas are,

- SPEN 33kV overhead electrical cables across the south site area, and
- SPEN LV overhead electrical cables on the south site area's north boundary with Holt Road, and
- SPEN LV overhead electrical cables on the south land area's south boundary with Harwood's Lane.

It is recommended that the land status and right of access of these services are determined as part of any development scheme moving forward.

The SPEN HV cables and also the LV cables if determined to be within the site, may conceivably have an 'Agriculture' wayleave which includes a 'lift & shift' diversion clause at SPEN's cost, based on planning permission having been granted for the land area, however diversions will require a route to be agreed.

Where road and pavement access is required as part of the proposed development to connect to an existing highway, then the existing utility cables, pipes, ducts and apparatus within a pavement zone, may result in the cables, pipes and ducts having to be lowered or protected as part of the condition of creating the access.

This would be conditional upon:-

- Consideration of the position and depth of the utility services;
- Formal approval from the respective Utility Company, and
- A requirement for diversions, replacements and reinforcement of utility services affected.

These considerations will likely impact on the services that are below ground in both the Holt Road and Harwood's Lane highway zones, being:-

- Holt Road
 - SPEN LV electrical cable(s)

- DWW water pipework
- BTOR telecom ducts
- Harwood's Lane
 - SPEN electrical cables
 - DWW water pipework
 - BTOR telecommunication ducts, if there is any modification to the Harwood's Lane/Trevalyn Way junction.

As part of the development's early design preparation, the existence and scope of formal wayleaves and easements will be reviewed and agreements reached as appropriate and necessary.

Any private services installations identified, whether unused, redundant or abandoned, will be investigated, decommissioned, isolated and either abandoned or removed as appropriate, as part of the development planning.

NEW SUPPLIES FOR THE PROPOSED DEVELOPMENT

An assessment of the utility services in the vicinity of the existing site has been undertaken.

It has been determined that the utility services within the surrounding area are capable of being reinforced and extended to serve the proposed housing development, based upon the assumption of 27 dph which would generate some 168 dwellings across the two sites.

The nature of the proposed development has been reviewed as part of this planning statement in order to be able to determine the utility services demand for each house type.

The scope of the development's requirement for electric, gas, water and telecommunications are within the utility network capacities presently within the district area and in conjunction with the respective Utility Company through application and negotiation, their networks can be modified and extended into the proposed development to serve the proposed homes and their occupants.

The overall infrastructure requirements of the proposed development have been taken into account to determine the support services, including street and pathway illumination for safe pedestrian and vehicle movement, fire fighting, and any monitoring or management requirements.

In addition, the overall assessment of the utility demand has taken into account the energy conservation features, including as appropriate energy reduction and the potential use of renewable energy technologies where appropriate.

The actual scope and layout of the utility supply networks will be planned to provide resilience, utilising ring main circuits whenever practicable to provide a robust supply installation.

The systems will be sized to provide for a margin of demand growth and modest expansion to minimise the necessity for future reinforcement, therefore minimising disruption and the impact of subsequent upgrade of buried utility apparatus.

The routes and locations of the proposed utility services network cables, pipes and ducts within the development will be in highway zones, below pavements or in designated service zones, utilising wherever practicable multi-service coordination and installations, to gain the advantage of single trench laying techniques.

It is anticipated at this stage that the scope of the required utility installations will be:-

SP Energy Network Electrical Supply

Informal liaison with SPEN has indicated that the supply for the proposed housing development will be fed at HV from the existing 11kV HV ring main network currently serving the Waverley Crescent and Trevalyn Way sub-stations, subject to a capacity survey.

A new sub-station will be required and ideally located in the vicinity of the existing HV cable position where it crosses Holt Road on either north or south site areas. This sub-station will supply LV to the proposed housing development through radial circuits, providing individual supplies to each dwelling.

Alternatively, if the above proved unavailable, then a HV supply may be made from the 11kV overhead cables near the south boundary of the south site area, with HV extended into the site to a sub-station, and thereafter LV radial circuits throughout the development.

West & Wales Utility Gas Supply

Informal liaison with W&WU has indicated that the existing district network would need to be reinforced from the Chester Road (western end of Chapel Lane) section of the Network with an upgrade of the 90mm PE gas pipework in Chapel Lane.

The likely hood is that this reinforcement/upgrade would be promoted by W&WU as an 'in-fill' scheme requiring a capital contribution to provide a suitable capacity main sufficiently along Holt Road to reach the development site areas to provide individual metered supplies to each dwelling.

Dee Valley Water, Water Supply

A new supply connection will be sought from the existing 9" AC main routed in Holt Road highway zone into both site development areas.

These new supply connections will be routed throughout the proposed development to provide individual metered supplies to each dwelling.

The Development's distribution main will also include fire hydrants as determined by North Wales Fire & Rescue Service.

Telecommunications

BT Openreach Cable Duct network

A cable duct connection will be sought from BT Openreach's existing cable duct and chamber network within the Holt Road highway zone into both site areas of the proposed development.

From these new ductwork connections, BT Openreach cable duct and chamber network will be routed around each site development area to provide individual cable duct connection to each dwelling.

The new BT Cable duct connection and network will be capable of carrying voice and data cables as required to provide broadband internet to each property, as required by the individual occupants.

BT voice, data, TV

Currently, BT are advising that the location of the proposed development is at an 'accepting orders' status for their 'superfast' broadband (i.e. up to 38Mbps download and 9.5Mbps upload capability). The location of the BT 'enabled exchange/cabinet' is approximately 1km south west from the proposed development.

Sky voice, data, TV

Currently, Sky are advising that the location of the proposed development is capable of being provided with between 10.5Mbps to 17.5Mbps download speeds.

Other providers of voice, data & TV

Other providers may potentially available via the BT Openreach cable duct and chamber network and in some cases through the BT cable/fibre network, subject to the specific and respective individual provides.

Utility Report Considerations

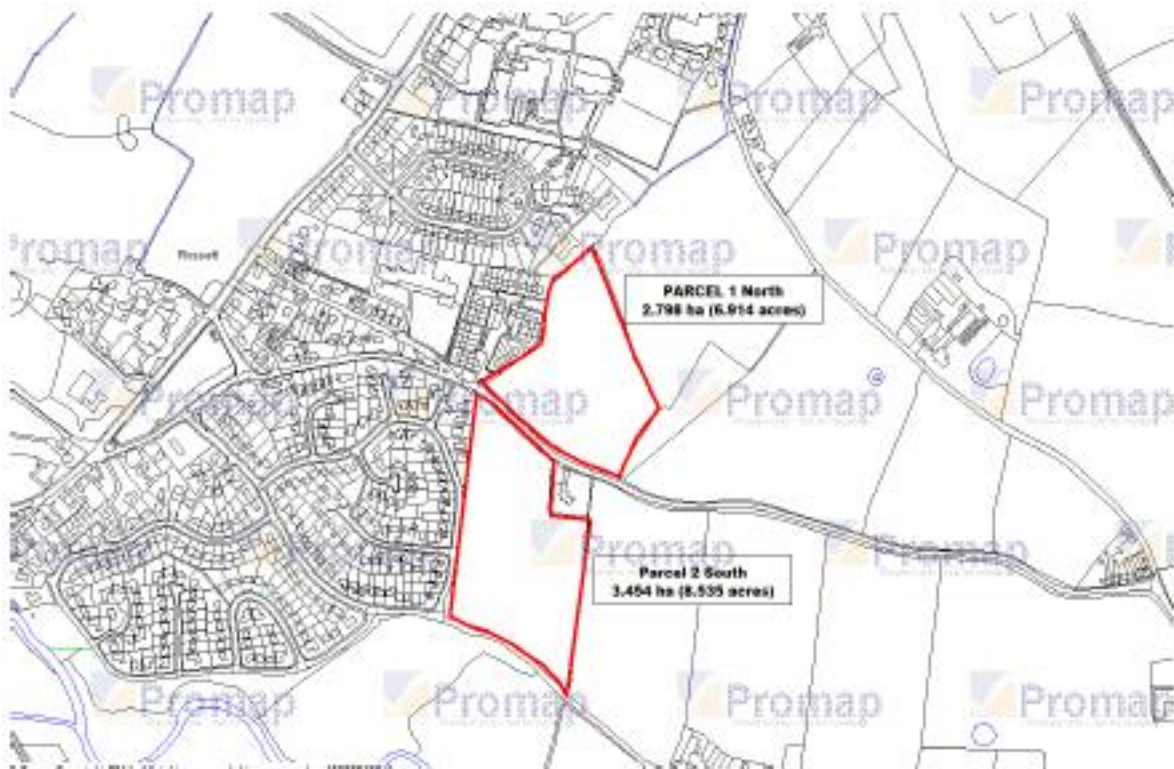
This utility supply assessment report is based on the respective Utility Company records and the statutory requirement for them to provide connections where planning and development is approved.

The information provided does not replace a requirement for a legal land search to be undertaken to identify land ownership, covenants, rights of way, wayleaves, easements, rights under Acts of Parliament.

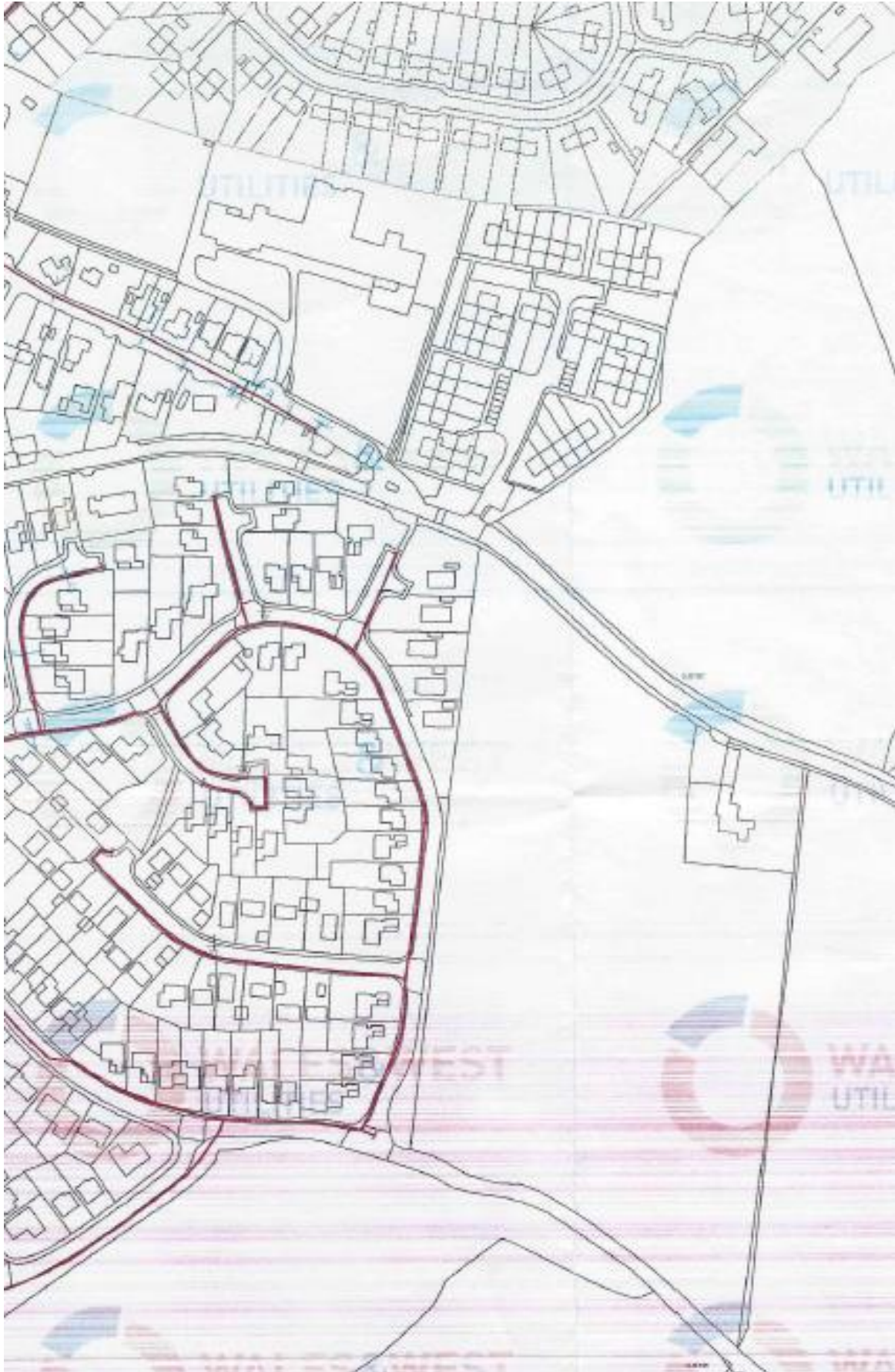
The assessment has been undertaken without any on-site surveys and it is understood that these will be carried out at an early design stage incorporating below ground services search/identification techniques.

APPENDIX A – Proposed Development Site Areas

Reproduced here to assist the Utility Planning Statement





APPENDIX C – West & Wales Utility Gas Record Plans

APPENDIX D – Dee Valley Water, Water Record Plan

