

PROJECT MANAGEMENT – DEVELOPMENT - UTILITIES

Bloor Homes Limited
Land South of Banbury Rise
Banbury
Utilities Assessment Report

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Utilities Assessment Report

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY	
Electricity – Western Power Distribution (DNO)	<p>Western Power Distribution (WPD) are the incumbent distribution network operator (DNO) for the local area.</p> <p>The asset records obtained from WPD confirm they have a network of High Voltage (HV) and Low Voltage (LV) cables within the nearby area. To the west of the site boundary within neighbouring land, WPD have an established overhead 11kV HV network, which feeds numerous distribution substations within the residential areas. The substations transform the power from HV to LV, which then powers the residents of the area via a network of cables in the vicinity.</p> <p>The asset records also confirm that WPD have no apparatus within the site boundary, therefore no diversionary works are anticipated.</p> <p>An enquiry was raised with WPD (ref: 4353998) in May 2022, to initially analyse the local network in order to identify the most suitable position to make a connection for the proposed development, based on a power demand of 2,500kVA for an all-electricity development and 1,000kVA for gas heating – both including a requirement for EV charge points. WPD confirmed a point of connection (POC) was possible from the 11kV HV overhead, within the neighbouring land to the west and capacity was available with no identifiable reinforcement works being required.</p>
Electricity – UK Power Solutions (IDNO)	<p>UK Power Solutions (UKPS) are an independent distribution network operator (IDNO), who have an embedded network within the local area.</p> <p>The asset records obtained from UKPS confirm they have a network of electrical apparatus to the north of the site boundary, which powers the previous phases for Bloor Homes.</p> <p>It is not anticipated diversionary works will be required for the proposed site entrance, nor within the site boundary due to the lack of onsite infrastructure.</p>
Gas – SGN (GT)	<p>SGN are the incumbent gas transporter (GT) for the local area.</p> <p>The asset records obtained from SGN confirm they have a network of Low Pressure (LP) gas mains (pipes) within the nearby area, primarily to the east within the residential area surrounding Bretch Hill and Edmunds Rd.</p> <p>The asset records also confirm SGN have no apparatus within the site boundary, therefore no diversionary works are anticipated for the development.</p> <p>A pre planning enquiry response received from SGN confirm a connection can be made to the existing low pressure gas main located within Balmoral Avenue, however reinforcement work will be required.</p>
Gas – ESP Gas (IGT)	<p>ESP Utilities (ESP) are an independent gas transporter (IGT), who have an embedded network within the local area.</p> <p>The asset records obtained from ESP confirm they have a network of low-pressure gas mains to the north of the site boundary, which provide gas to the dwellings of previous phases for Bloor Homes.</p> <p>It is not anticipated diversionary works will be required for the proposed site entrance, nor within the site boundary due to the lack of onsite infrastructure.</p>
Clean Water – Thames Water	<p>Thames Water are the incumbent distribution network operator for clean water in the local area.</p> <p>The asset records obtained from Thames Water confirm they have a network of clean water mains within the nearby area, primarily to the north and east of the site boundary.</p>

	<p>It is not anticipated diversionary works will be required for the proposed development, due to the lack of onsite infrastructure.</p> <p>A pre planning enquiry was raised with Thames Water (ref: DS6095560) in May 2022, to initially analyse the existing clean water network for capacity. Thames Water confirmed there would be sufficient capacity in the network to serve the first 50 properties of the development, however they were unable to confirm capacity for the entire development of 250 dwellings without network modelling. The anticipated point of connection would be from the 180mm water main within Wilson Road to the north.</p>
Foul Water – Thames Water	<p>Thames Water are the incumbent foul water distribution network operator for the local area.</p> <p>The asset records obtained from Thames Water confirm an established sewer network within the local area, primarily to the east of the site boundary within the residential area.</p> <p>The site boundary is clear off any Thames Water foul and surface assets, therefore diversionary works are not anticipated for the development.</p> <p>A pre planning enquiry was raised with Thames Water (ref: DS6095561), to assess the local network for connection. The enquiry is still with Thames Water to complete, in which BWB Consulting are expecting a response by 15th July 2022.</p>
Telecommunications - Openreach	<p>Openreach manage and install the primary telecommunications infrastructure across the UK.</p> <p>The asset records obtained from Openreach show a network of underground and overhead lines within the local residential area. From Milestone Farm towards the south of the site, an underground cable runs to the east of the site boundary, at the rear of the dwellings on Thornbury Rise. This cable encroaches the site boundary to the southeast and central towards Withycombe Farm and along the public footpath through the site from Balmoral Avenue.</p> <p>It is anticipated diversionary works will be required, to reposition the underground asset within the site boundary. With the footpath from Balmoral Avenue to Withycombe Farm being retained, this cable through the path will likely be retained.</p> <p>The nearest Openreach exchange to the centre of the site, is circa. 1.4miles east of the site boundary and is Fibre enabled.</p>
<p>This summary should be read in conjunction with BWB's Sustainable Drainage Strategy WFB-BWB-ZZ-XX-RP-CD-0001-SDS), which reflects an assessment of the site based on information received by BWB at the time of production.</p>	

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APPENDIX 3: WPD (Drawing. No - Emu_01062022_125627.overlay-Default-000)

1. INTRODUCTION

Instruction

- 1.1 BWB Consulting (BWB) was instructed by Bloor Homes Limited (the Client) to carry out a Utilities Assessment Report . Details of the project brief are included in BWB proposal reference BMP2135 – Land South of Banbury Rise dated July 2022 .
- 1.2 The purpose of the UAR is to identify any existing infrastructure that may constrain the development within and around the site boundary, and to identify a strategy for the delivery of future supplies to the site. The assessment also considers whether any utility service diversions are required to accommodate the development proposals.
- 1.3 The proposed development is anticipated to comprise of circa 250 domestics dwellings over an area of approximately 14.09 Hectares (Ha), as reflected in the Concept Plan produced by Pegasus Design (DRWG: P20-1853_02), contained within **Appendix 1**.

Scope of Works

- 1.4 The report will outline and assess the utilities issues in relation to the proposed development site and will identify the requirements for new utility infrastructure, potential upgrade/reinforcement works, and/or the need for further investigation/modelling. The scope of works include;
 - i. Asset Records – request the latest records showing the extents of existing statutory services present within the vicinity of the site and plot on topographical survey/OS background mapping to provide a Composite Services Plan (CSP)
 - ii. Diversion of existing services – undertake a review of the CSP against the proposed site layout to identify which utility assets are required to be diverted or accounted for within the development layout proposal.
 - iii. Demand calculations – estimate the total utility load demand requirements for the development, for each of the mains utility services.
 - iv. New connections – Identify points of connection and any reinforcement requirements for the provision of new supplies, including indicative infrastructure routes from the incumbent suppliers and independent providers.

2. THE SITE

Site Location

- 2.1 The proposed site development is located in the town of Banbury's eastern edge and comprises of two agricultural fields totalling approximately 14.09ha. The site can be found at national grid reference SP434402 and is illustrated below in **Figure 2.1**.

Figure 2.1: Site Location Plan



3. UTILITY PROVIDERS

- 3.1 BWB has, for the purpose of this report, made initial utility search enquiries to the statutory undertakers to ascertain existing utility infrastructure within and adjacent to the proposed development site.
- 3.2 The site is shown to be situated in an area where Western Power Distribution (WPD) operate the electricity network, SGN operate the gas infrastructure and Thames Water (TW) maintain the clean and wastewater drainage. The telecommunications infrastructure is provided by Openreach. ESP Utilities also have a private embedded network within the area for gas and electricity, with the latter being electricity being under the name, UK Power Solutions.
- 3.3 The statutory undertakers who have assets within or in the vicinity of the proposed development site are listed in the **Table 3:1** below.

Table 3.1: Statutory Undertakers

UTILITY	UTILITY PROVIDER	LOCATION
Electricity	Western Power Distribution	Near the site
Electricity	UK Power Solutions	Near the site
Gas	SGN	Near the site
Gas	ESP Utilities Group	Near the site
Cleanwater	Thames Water	Near the site
Wastewater	Thames Water	Near the site
Telecommunications	Openreach	Within the site

- 3.4 From a review of the existing asset records obtained by BWB, a Composite Services Plan (Drawing No: WFB-BWB-GEN-XX-DR-VUT-0001 Composite Services Plan S2) has been prepared showing the extent of the existing utility infrastructure within and adjacent to the proposed development site boundary, this is contained within **Appendix 2**.
- 3.5 The information contained within this report is derived from data provided by the core main public utility companies. No information has been provided in relation to "private" infrastructure that might be present within or adjacent to the proposed development site.
- 3.6 It should be noted that all asset records obtained have a validity period of a maximum 3-6 months, and the capacity investigation responses received at the time of writing this report are correct and have a validity period which ranges from 3-12 months, the result of these enquiries may be subject to future reinforcement/change by network operators.
- 3.7 Where statutory undertakers have identified apparatus within or near the site proposal, those services are discussed withing the following sections.

4. ELECTRICITY INFRASTRUCTURE

Existing Electricity Infrastructure

- 4.1 The proposed site development resides in an area where Western Power Distribution (WPD) and UK Power Solutions (UKPS) maintain the electricity infrastructure in the local area. No assets are shown within the proposed development boundary.

Existing WPD Infrastructure

- 4.2 The WPD asset records show a local HV and LV network in the local residential area to the north and east of the site boundary.
- 4.3 To the east on Bretch Hill, WPD have an underground 11kV HV network, which powers the local distribution substations in the area, along with Orchard Fields Community Primary and St Joseph's. The substations in the area transform the power from HV to LV, in order to provide the local residents with the lower voltage required.
- 4.4 The local area is fed via the 11kV overhead cable to the west of the site, which in turn powers Withycombe Farm via a pole mounted transformer. This overhead is grounded as it enters the land to the north, which is a previous phase of the development. The HV runs through Bailey Road and a distribution substation named Banbury Rise South (No. 77/9571).

Existing UKPS Infrastructure

- 4.5 The UKPS asset records show a local embedded network to the north of the site boundary, within a previously developed phase.
- 4.6 The asset records obtained from UKPS show a network of underground LV cables through Longley Crescent, Wilson Road, Bailey Road and beyond.

Diversiónary Works

- 4.7 It is not anticipated diversionary works will be required to enable the development.
- 4.8 The position of the site access from Longley Crescent is already established, therefore diversionary works are not anticipated for site access.

Electrical Vehicle Charging (EVC) Demand

- 4.9 The Government have announced their intention to withdraw the internal combustion engine from road transport by 2040, which will drive a shift towards electric vehicles, and alternative technologies.
- 4.10 One of the key challenges is going to be electricity, and how to respond to the potential huge volume, at present due to the uncertainty surrounding the potential uptake and use of EVC points (EVCP). The load demand profile discussed with WPD has considered the potential demand required for EVCPs.

- 4.11 It is advised that further consultation with Banbury Town Council is undertaken to advise on the future energy plan, the Local Authority (LA) which will likely require a percentage of the development to facilitate for electric vehicles to meet Net Zero requirements.

Proposed Electricity Infrastructure

- 4.12 An enquiry was raised with WPD (ref: 4353998, dated 24th May 2022), in order to analyse the local network for additional capacity and connection of the proposed development.
- 4.13 WPD were requested to assess the local network for a point of connection, based on two heating strategies for the development. An indicative load demand of 2,500kVA was used for an all-electricity development, with 1,000kVA for a gas heated development.
- 4.14 WPD carried out the required network analysis, to identify the most suitable position to make a connection for the proposed development. It was determined the overhead 11kV HV to the northwest of the site within the neighbouring land, could provide a suitable point of connection for the development.
- 4.15 Based on the heating strategies mentioned in section 5.12, WPD confirmed capacity was available within the network to provide a connection point, with no identifiable reinforcement works being required. The new development would need to be looped into the existing network from two points, which is detailed in the drawing provided by WPD (Drawing No: Emu_01062022_125627.overlay-Default-000), contained within **Appendix 3**.

5. GAS INFRASTRUCTURE

Existing Gas Infrastructure

- 5.1 The proposed site development resides in an area where SGN maintain the primary gas infrastructure, with ESP Utilities Group maintaining a smaller embedded network to the north of the site boundary. No gas assets are shown within the proposed development boundary.

Existing SGN Infrastructure

- 5.2 The SGN asset records show a well-established gas network within the local area, primarily to the east and south of the site.
- 5.3 To the east of the site within the residential area of off Bretch Hill and Edmunds Rd, there is a network of Low Pressure (LP) gas mains which serve the local residents.
- 5.4 To the south along Broughton Road, the LP gas main continues west towards North Newington, Broughton and Lower Tadmarton.

Existing ESP Infrastructure

- 5.5 The ESP asset records confirm an embedded gas network to the north of the site boundary, within a previously developed phase.
- 5.6 ESP have a 180mm MDPE (Medium Density Polyethylene) LP gas main within Wilson Road, which continues north onto Bailey Road and Tony Humphries Road.
- 5.7 There is also a 125mm MDPE LP gas main within Longley Crescent, along with 90mm and 63mm MDPE LP gas mains within the adjacent side roads off Longley Crescent.

Diversionsary Works

- 5.8 It is not anticipated diversionsary works will be required to enable the development. The position of the site access from Longley Crescent is already established, therefore diversionsary works are not anticipated for site access.

Proposed Gas Infrastructure

- 5.9 An enquiry was raised with SGN, in order to assess the local network for capacity and connection. The peak hourly load used for the purposes of this assessment was 60kW per dwelling, which based on 250 is 15,000kW.
- 5.10 SGN responded on the 13th June 2022 (Ref: 2308052) to advise a connection can be made to the existing low pressure gas main located outside of 34 Balmoral Avenue, SGN have advised that reinforcement work will be required to accommodate for the proposed development.

- 5.11 Due to ESP Utilities having an embedded network to the north, it is anticipated an approach will be made to ESP for further infrastructure on this phase.

6. CLEAN WATER INFRASTRUCTURE

Existing Clean Water Infrastructure

- 6.1 The proposed development site is in an area where Thames Water Ltd (TW) maintain the Clean Water infrastructure. Asset records received (Dated: 20/05/2022) have identified assets within immediate proximity to the proposed development site boundary and is servicing the local area. There is no clean water infrastructure within the proposed development red line boundary.
- 6.2 TW have an established local clean water network, which provides water to the residential estates to the north and east of the site.
- 6.3 TW have an underground 125mm water main within Longley Crescent to the north, along with a 6", 4" and 3" water main to the east on Dover Avenue.
- 6.4 TW also have a 4" and 3" water main on Balmoral Avenue, with a further 125mm main on Thornbury Rise to the east

Diversiory Works

- 6.5 It is not anticipated diversionary works will be required to enable the development. The position of the site access from Longley Crescent is already established, therefore diversionary works are not anticipated for access.

Proposed Clean Water Infrastructure

- 6.6 A pre planning enquiry was raised with TW (ref: DS6095560, dated 26th May 2022), in order to assess the local network for capacity and a proposed point of connection for the development.
- 6.7 The proposed point of connection as per the desktop study completed by TW as part of the pre planning enquiry, was to the existing 180mm main located within Wilson Road to the north. Further liaison with TW confirmed that there would be sufficient capacity in the clean water network to serve the first 50 properties of the development, however TW were unable to confirm capacity for the entire development of 250 dwellings without further investigation.
- 6.8 There is opportunity for the client to enter an underwriting agreement with TW, depending on the build programme, this a legal binding contract which allows TW to undertake modelling which is estimated around 18 months in total (this consists of 6 months modelling, 6 months design, 6-month reinforcements).

7. FOUL AND SURFACE WATER INFRASTRUCTURE

Existing Foul and Surface Water Infrastructure

- 7.1 The proposed site development is situated in an area where Thames Water (TW) provide the foul and surface water infrastructure.
- 7.2 TW have an established foul and surface water network in the local area, primarily to the east of the site boundary.
- 7.3 To the east along Dover Avenue, TW have a 225mm surface water sewer, alongside a 225mm and 150mm foul water sewer. Continuing to the east on Bretch Hill and Balmoral Avenue, TW have a 225mm and 150mm surface water sewer and a 150mm foul water sewer.
- 7.4 The TW continues southwest onto Thornbury Rise, where TW have a 150mm surface water sewer and a 150mm foul water sewer.
- 7.5 Based on the TW asset records obtained in May 2022, there are no foul or surface water sewers within the site boundary.

Diversiónary Works

- 7.6 It is not anticipated diversionary works will be required to enable the development.
- 7.7 The position of the site access from Longley Crescent is already established, therefore diversionary works are not anticipated for site access.

Proposed Foul & Surface Water Infrastructure

- 7.8 A pre planning enquiry was raised with TW (ref: DS6095561, dated 26th May 2022), in order to assess the local sewer network for capacity and connection. The response is expected from TW by the 15th July 2022.
- 7.9 The proposed point of connection to the foul network is preferred from the north, however the asset records obtained from TW, do not show available assets in this area and are currently under review with TW, an update to the report will be made once the information has been provided.
- 7.10 Network modelling has been carried out on the development in 2016, in order to determine capacity, however as the utility networks evolve and change on a regular basis, it is anticipated further modelling may be required.
- 7.11 This section is to be read in conjunction with the BWB Sustainable Drainage Strategy¹. it is proposed that the foul water will drain the site via gravity with a point of connection being achieved to the proposed drainage system of the development to the north.

¹ WFB-BWB-ZZ-XX-RP-CD-0001-SDS

- 7.12 TW are obligated to accept the foul flows from the development with the benefit of planning consent and would therefore take necessary steps to ensure that there is sufficient treatment capacity available. An S106 agreement of the Water Industry Act 1991, will need to be completed for the final connection to the existing foul water sewer network being undertaken via S98 Agreement of the Water Industry Act 1991.

8. TELECOMMUNICATIONS INFRASTRUCTURE

Existing Openreach Infrastructure

- 8.1 The proposed development is within an area operated by Openreach.
- 8.2 Openreach have an established telecommunication network in the local area, which serves the residents primarily to the north and east of the site.
- 8.3 The asset records obtained from Openreach show a network of overhead and underground cables to the east along Dover Avenue, Bretch Hill, Balmoral Avenue and Thornbury Rise. To the north along Longley Crescent, Wilson Road and Bailey Road, Openreach have a new underground network, which feeds the residential area to the north.
- 8.4 Openreach have an underground cable from Balmoral Avenue, which encroaches the boundary from the east. The cable runs within a public footpath, which feeds Withycombe Farm to the west/north of the site.
- 8.5 The asset records obtained from Openreach also confirms, an underground cable from Milestone Farm to the south, which encroaches the site boundary to the southwest. This cable runs along the eastern boundary of the site, to the rear of the dwellings on Thornbury Rise. This cable continues north past the path and further into the site boundary, before terminating to the east of Withycombe Farm. This cable route is detailed with the composite services drawing in Appendix 2.

Diversionsary Works

- 8.6 It is anticipated diversionsary works will be required, due to Openreach apparatus within the site boundary.
- 8.7 The underground cable from Balmoral Avenue, which is through the footpath to Withycombe Farm is likely to be retained, as the path is being retained based on the Concept Plan in Appendix 1.
- 8.8 A further assessment of the cable running diagonally from the footpath to the east of Withycombe Farm is recommended. This would be via a PAS128 Level B GPR (Ground Penetrating Radar) survey, to establish the accurate positioning of this asset.

Proposed Telecommunications Infrastructure

- 8.9 It is envisaged that the supply strategy will be via a new connection to the existing Openreach infrastructure off Thornbury Rise or Balmoral Avenue. Alternatively, via Longley Crescent to the north, as the location of the proposed access to the site with the new infrastructure running through the development in line with the proposed Concept Plan.
- 8.10 It is recommended that early engagement with telecommunications providers is made as there is plenty of potential, from Openreach to serve the proposed development.

Openreach normally provide telephone and broadband services to all new developments free of charge, with the end user ultimately paying for the connection costs. All civils works will typically be undertaken by the developer using free issue of Openreach ducts and Openreach specified ducts boxes to the Openreach confirmed design, which will allow for Openreach to pull cables through the newly installed ducts as and when required.

- 8.11 Openreach will make payments to the developer for construction and installation of Openreach network on new developments on a per plot basis. The payment amounts are agreed between Openreach and the House Builders Federation (HBF).
- 8.12 Banbury telecommunication exchange is located circa 1.4miles east and is fibre enabled to the cabinet and premises. Cable is not currently available in the area via Virgin Media; however, the exchange is open via a process known as LLU (Local Loop Unbundling), which means a number of different broadband providers are available. In this area, those include TalkTalk, Vodafone, and Sky Broadband.
- 8.13 Further enquires to alternative telecommunications companies is also recommended to understand the telephone and broadband service offerings available to the future on site customers.

9. CONCLUSION AND RECOMMENDATIONS

Summary of Investigations

9.1 The table below summarises the result of investigations undertaken by BWB Consulting.

Table 10.1: Summary of Investigations

UTILITY PROVIDER	EXISTING UTILITY INFRASTRUCTURE		NEW UTILITY INFRASTRUCTURE REQUIREMENTS
	ONSITE / NEAR DEVELOPMENT	DIVERSION REQUIREMENTS	
Western Power Distribution (Electricity)	The local area is well served by WPD, with assets within close proximity to the site. There are no assets within the site boundary.	Based on the concept plan, no diversionary works are anticipated for the development, due to the lack of on-site infrastructure.	For an electricity heated (2,500kVA) and gas heated (1,000kVA) development, WPD have advised points of connection with capacity are available within the existing network, without reinforcement work being required.
UK Power Solutions (Electricity)	UKPS have an embedded network to the north of the site, within the adjacent residential area. There are no assets within the site boundary.	Based on the concept plan, no diversionary works are anticipated for the development.	It is anticipated a connection proposal will be obtained from UKPS for this phase. This was not carried out as part of the utilities statement.
SGN (Gas)	The local area is well served by SGN, with assets within close proximity to the site. There are no assets within the site boundary.	Based on the concept plan, no diversionary works are anticipated due to the lack of on-site infrastructure.	SGN have advised a connection can be made to a Low-pressure gas main, reinforcement work will be required.
ESP Utilities Group (Gas)	ESP Utilities have an embedded network to the north of the site, within the adjacent residential area. There are no assets within the site boundary.	Based on the concept plan, no diversionary works are anticipated for the development.	It is anticipated a connection proposal will be obtained from ESP Utilities for this phase. This was not carried out as part of the utilities statement.
Thames Water (Clean Water)	A well-established clean water network is operating within the local area. No TW assets are present within the site boundary.	No diversionary works are anticipated to facilitate the development proposals.	TW have confirmed capacity is limited within the network. Capacity is available for the first 50 dwellings but further investigations via

			modelling will be required for the entire development.
Thames Water (Foul water)	A well-established foul and surface water network is operating within the local area. No TW assets are present within the site boundary.	No diversionary works are anticipated to facilitate the development proposals.	TW have yet to provide a response to the pre planning enquiry, however it is anticipated modelling may be required.
Openreach (Telecommunications)	The local area is well served by overhead and underground Openreach assets. Based on the asset records obtained, Openreach have apparatus within the site boundary.	It is anticipated diversionary works will be required, to facilitate the development proposals.	Openreach normally provide telephone and broadband services to all new developments free of charge. Early engagement is recommended.

Conclusions

- 9.2 The information that has been received demonstrates that the existing networks appear to be reasonably well established, and the indication is that utility capacity can be provided by the existing infrastructure or through further localised network reinforcement. Consideration will need to be given to continue supply to the existing customers, whilst facilitating the delivery of the new development.
- 9.3 Following a review of the surrounding assets, it is anticipated that protection works may be required to accommodate site access for the electrical and telecommunications infrastructure. Further discussion will be required to discuss protection of the existing clean water main which is located within the site boundary.
- 9.4 WPD have advised that there is sufficient capacity within the local network to supply the full development, however further analysis will be required for the future network at detailed design stage, increased demand for electric storage heating types will open up further consultations.
- 9.5 It is not anticipated that any of the utilities identified are in any way a barrier to the development site and there is no reason for the development to not be allocated from a utility's perspective.

Recommendations

- 9.6 It is recommended that further consultation with the relevant companies is undertaken closer to the time of development to confirm the availability of capacity within the relevant utility networks.
- 9.7 For electrical requirements, we recommend further consultation is required with the developer to discuss the phasing of the development and the build program to factor

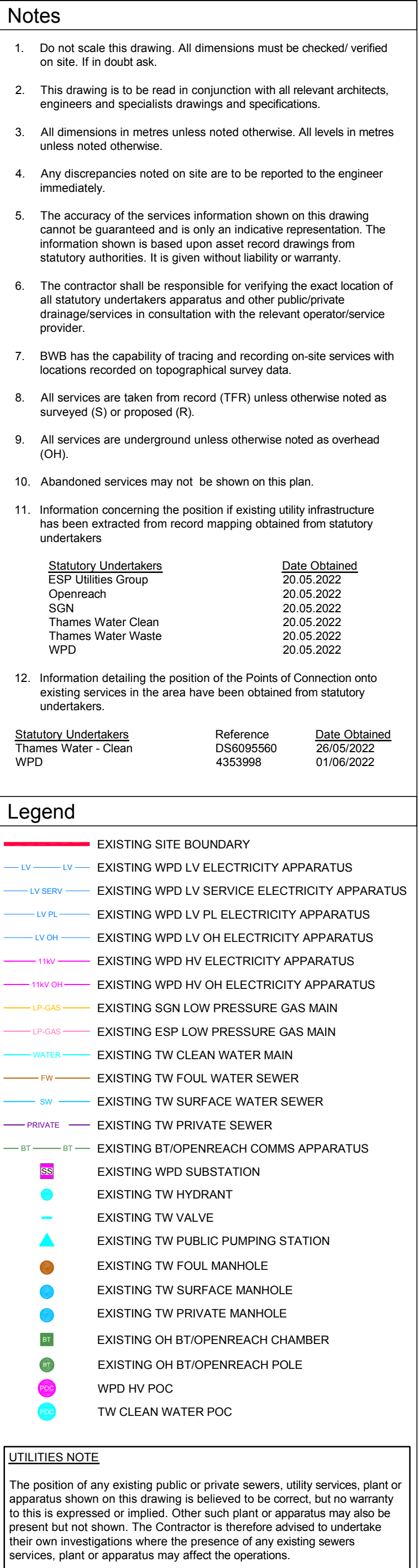
in whether the development will be non-gas heated and the requirement for the electrical vehicle charging points.

- 9.8 The local plan for the area will need to be reviewed for the requirements of Electrical Vehicle Charging and it is recommended the developer reviews the build programme and the development phasing to understand whether there will be a need for gas heated properties.
- 9.9 It is recommended post planning that further liaison is undertaken with TW to discuss modelling timescales for the clean water, alternatively the client can enter an underwriting agreement for modelling to commence.
- 9.10 It is recommended that further liaison is undertaken with TW to register the site with the strategic asset management team for the reinforcements works required to take the proposed foul water flows for the site.
- 9.11 We recommend that detailed proposals and quotations are sought from the utility providers and the open market at detailed design stage to realise the best financial offering. It is advised that multi-utility companies are approached to provide quotations for the contestable works within the UAR, this will give a better understanding of costs associated with bringing utility infrastructure onto the proposed site development.
- 9.12 Following planning permission, the development is to consider a telecommunications strategy and that it is recommended the site is registered to Openreach.
- 9.13 It is recommended that a PAS128 Level B below ground survey is undertaken prior to commencing site works to determine whether if there are any unknown/private apparatus present within the confines of the site boundary.
- 9.14 We recommend that a search is carried out to establish if any of the utility infrastructure is held under legal agreements and consents.

APPENDICES

APPENDIX 1: Concept Masterplan (P20-1853_02H)

APPENDIX 2: WFB-BWB-GEN-XX-DR-VUT-0001 Composite Services Plan S2



Issues & Revisions

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Project Title

**Land South of Banbury
Rise**

Drawn:	G. E. Maher	Reviewed:	N. Mistry
BWB Ref:	BMP2135	Date:	17.06.22
		Scale@A0:	1:1000
Drawing Status			
PRELIMINARY			
Project - Originator - Zone - Level - Type - Role - Number			Status
WFB-BWB-GEN-XX-DR-VUT-0001			S2
			P01

APPENDIX 3: WPD (Drawing. No - Emu_01062022_125627.overlay-Default-000)

