



UNIVERSAL DESTINATIONS & EXPERIENCES UK PROJECT

Former Kempston Hardwick Brickworks
and adjoining land, Bedford

Utilities Statement

Report reference: 6.10.0

Revision number: 00

Date: June 2025



CONTENTS

1	INTRODUCTION	1
1.1	INTRODUCTION AND PURPOSE	1
1.2	REPORT STRUCTURE	2
2	EXISTING UTILITIES	3
2.1	SOURCES OF INFORMATION	3
2.2	AFFECTED UTILITIES AND STAKEHOLDERS	3
2.3	HEALTH AND SAFETY EXECUTIVE	5
3	NEW UTILITY SUPPLIES	6
3.1	DETERMINING REQUIREMENTS	6
3.2	ENERGY STRATEGY AND ELECTRIFICATION OF HEAT AND COOLING	7
3.3	ELECTRICITY REQUIREMENTS	8
3.4	BATTERY ENERGY STORAGE SYSTEM	11
3.5	NATURAL GAS REQUIREMENTS	11
3.6	POTABLE WATER REQUIREMENTS	12
3.7	FOUL WATER REQUIREMENTS	13
4	CONCLUSIONS AND SUMMARY	15

TABLES

Table 2-1: Statutory Undertakers	3
Table 2-2: Utilities on or Close to the Site	3
Table 3-1: New Supply Demands, High Level Summary	6
Table 3-2: Water Supply Requirements	13

FIGURES

Figure 3-1: Potential UKPN Points of Connection Locations Considered	9
Figure 3-2: UKPN Indicative Schematic	10

APPENDICES

APPENDIX A

EXISTING UTILITIES PLAN

1 INTRODUCTION

1.1 INTRODUCTION AND PURPOSE

- 1.1.1. This Utilities Statement has been prepared on behalf of Universal Destinations & Experiences (UDX) who is seeking planning permission for the construction and operation of a Universal Entertainment Resort Complex (ERC), and associated development, in Bedford. The proposal is sponsored by the Department for Culture Media and Sport (“DCMS”). The Department for Transport (“DfT”) and its associated arm’s-length bodies have assisted in the development of the highways and rail related elements of the proposal with Bedford Borough Council (“Bedford BC”). The proposal intends to provide sufficient information to enable the Secretary of State for Housing, Communities and Local Government (“MHCLG”) to consult on and consider making a planning decision.
- 1.1.2. The Site is located south-west of Bedford, Bedfordshire and is broadly to the east of the A421 and west of the Midland Main Line and is on the former Kempston Hardwick brickworks and agricultural land. The Site is divided into four main land areas referred to in the planning proposal as the Core Zone, Lake Zone, West Gateway Zone, and East Gateway Zone. The proposed ERC lying within these zones would allow a theme park and associated uses including retail, dining, entertainment; visitor accommodation; sport, recreation, leisure and spa facilities; venues with conference and convention spaces; associated services and uses for any operational or administrative functions; utilities generation, storage, collection, treatment, and processing facilities associated with the ERC; vehicle and cycle parking, maintenance and servicing, and transportation hubs; access routes and circulation spaces; landscaping; utility infrastructure; and use of land necessary to support construction.
- 1.1.3. The planning proposal also includes a series of infrastructure improvements including:
- A new A421 junction;
 - An expanded railway station on the Thameslink/Midland Main Line at Wixams;
 - Improvements to Manor Road; and
 - Improvements to certain other local roads.
- 1.1.4. It also safeguards land for a potential new railway station on the proposed East West Rail (EWR) Bletchley to Bedford line, should this come forward in the future.
- 1.1.5. Capitalised terms that are not defined within this document shall have the same meaning as set out in **Appendix 0.1: Glossary and Acronyms (Volume 3)** of the Environmental Statement (ES) (**Document Reference 4.0.1.0**).
- 1.1.6. The total Site area is 268 hectares (ha) in size and centred approximately at National Grid Reference TL025442. The Site plan is shown in the **Site Location Plan (Document Reference: 1.6.0)**.
- 1.1.7. The Proposed Development is described in **Chapter 1: Introduction and Site Description (Volume 1)** of the ES (**Document Reference 2.1.0**).

- 1.1.8. This Utilities Statement has been prepared following engagement with statutory Undertakers¹ and independent multi-utility companies and provides details of the current constraints to the Proposed Development due to existing services, the availability and capacity of existing public utilities to service the Proposed Development, and what reinforcement works will be required to meet predicted demand for utility services based on different development phases.

The utility enquiries have been developed in two phases relating to the theme park (this is broadly related to the Core Zone but does include development in other zones) Primary Phase Opening Year (2031), and the Full Buildout (2051), inclusive of the non-theme park aspects of the development (this aligns to the West Gateway Zone, Lake Zone and completion of Core Zone).

1.2 REPORT STRUCTURE

- 1.2.1. Following this introduction, the rest of the report is structured as follows:

- Section 2 – This section discusses the source of existing utilities information and provides a summary of existing utilities which are located in close proximity to the Site and includes information on likely relocation or protection works;
- Section 3 – This section describes the basis of enquiries that were made to the utility companies for new supplies, including provisions for the energy strategy, the breakdown of utility loading estimates calculated, and initial high level discussions on potential options for routes to the Site which may be required from points of connection on the incumbent networks; and
- Section 4 – Provides conclusions and summary.

¹ The persons (corporate or otherwise) who are permitted to carry out the Proposed Development (including their contractors and other persons appointed by them in connection with the carrying out of the Proposed Development).

2 EXISTING UTILITIES

2.1 SOURCES OF INFORMATION

- 2.1.1. A desktop utility search was completed to British Standards Institution PAS 128 (QL-D) to locate utility assets on and in the local vicinity of the Proposed Development. The searches involved conducting “C2” enquiries with utility companies to determine the presence and ownership of utility services. Utility documents were obtained via application or online datasets, with results consisting of assorted PDF files, digital drawings, and paper plans.
- 2.1.2. The information detailing existing utilities has been transcribed visually onto an Existing Utilities Plan (drawing 320-1000-P-U-100) in **Appendix A. Table 2-1** summarises the main utility statutory Undertakers in the area.

Table 2-1: Statutory Undertakers

Utility	Statutory Undertaker
Electricity	UK Power Networks (UKPN)
Gas	Cadent Gas
Potable Water	Anglian Water
Sewers	Anglian Water
Telecommunications	Openreach

2.2 AFFECTED UTILITIES AND STAKEHOLDERS

- 2.2.1. From the utility records obtained, **Table 2-2** summarises what existing utility operators and their infrastructure, including the statutory Undertakers listed above, are located within or near the Site boundary and that are likely to be affected.

Table 2-2: Utilities on or Close to the Site

Utility	Network Operator	Affected Asset Type
Electricity	UKPN	33kV, 11kV, Low Voltage (LV)
Gas	Indigo Pipelines Ltd	250mm Medium Pressure (MP)
Potable Water	Anglian Water	180mm, 150mm mains
Sewers	Anglian Water	225mm foul rising main
Sewers	FCC Environmental (Private)	160mm to 250mm leachate main
Telecommunications	Openreach	Ducted cables/fibre
Telecommunications	Virgin Media	Ducted cables/fibre
Telecommunications	MBNL (EE/Three)	Mast

2.2.2. The Site is largely clear of existing utilities, with nearest services mainly confined to Woburn Road (which is a minor road running adjacent to the A421 dual carriageway west of the Site) and within Manor Road which bisects the Site east-west between Core Zone and Lake Zone.

2.2.3. A summary of existing services potentially affected is set out below by asset type.

ELECTRICITY

2.2.4. Underground UKPN 33kV and 11kV cables run within Woburn Road west of the West Gateway Zone (refer to drawing 320-1000-P-U-100, Constraint A, as shown in **Appendix A**. These cables will likely need to be relocated locally within and to suit the proposed highway junction and layout for the main west gateway access into the theme park.

2.2.5. An overhead UKPN 33kV line crosses the West Gateway Zone from the junction of Broadmead Road and Woburn Road and runs northwest to the boundary of the Site and then continues north out of the Site Boundary before undergrounding at Manor Road (refer to drawing 320-1000-P-U-100, Constraint B, as shown in **Appendix A**. This electricity line will likely need to be moved underground between the Site boundary interfaces in the West Gateway Zone to accommodate proposed works.

2.2.6. An overhead UKPN Low Voltage (LV) line enters the south of Core Zone from Broadmead Road and runs a short distance west to Randalls Farm Education Centre (refer to drawing 320-1000-P-U-100, Constraint C, as shown in **Appendix A**. UKPN have confirmed the supply is live and will need to be maintained. The electricity line will need to be relocated to accommodate proposed works.

2.2.7. Both High Voltage (HV) and Low Voltage (LV) cables are present along the length of Manor Road which serve existing adjacent properties. Local relocations will be required to accommodate the proposed realignment of the highway.

GAS

2.2.8. An Indigo Pipelines Ltd 250mm medium pressure (MP) gas main runs within Manor Road bisecting Zones A and B (refer to drawing 320-1000-P-U-100, Constraint F, as shown in **Appendix A**.

2.2.9. Indigo Pipelines Ltd are an Ofgem licensed Independent Gas Transporter (IGT). The pipeline will likely require relocation to accommodate the proposed realignment of Manor Road.

POTABLE WATER

2.2.10. A 150mm Anglian Water potable water main runs within the east verge of Woburn Road adjacent to the West Gateway Zone. The potable water main also roughly follows the alignment of Broadmead Road adjacent to the southern Site boundary of the Core Zone (refer to drawing 320-1000-P-U-100, Constraint A and D, as shown in **Appendix A**. This 150mm potable water main does not presently service the Site, and it is likely that the main will need to be relocated locally within and to accommodate the proposed highway junction and layout for the main west gateway access into the theme park. Possible minor relocation or protection may be required to accommodate proposed Site access from Broadmead Road.

2.2.11. A 150mm Anglian Water potable water main runs within Manor Road serving adjacent properties and businesses (refer to drawing 320-1000-P-U-100, Constraint F, as shown in **Appendix A**. This 150mm potable water main does not presently service the Site, and it is likely that the main will require relocation to accommodate the proposed realignment of the highway.

FOUL WATER

- 2.2.12. A 225mm Anglian Water foul water rising main, pumped from Stewartby south of the Site, runs north along the eastern boundary of Core Zone to Coronation Business Park.
- 2.2.13. This 225mm foul water rising main does not service the Site, and it is unlikely this asset will require relocation due to its position at the eastern periphery of the Core Zone (refer to drawing 320-1000-P-U-100, Constraint E, as shown in **Appendix A**. Should final detailed design indicate that the main will be impacted by proposed works, diversion or protection requirements will be discussed with Anglian Water.
- 2.2.14. A leachate pipeline of between 160mm and 250mm diameter, pumped from Marston Vale Treatment Works south of the Site, enters the West Gateway Zone from Broadmead Road (refer to drawing 320-1000-P-U-100, Constraint H, as shown in **Appendix A**. The pipeline runs north adjacent to the west side of the railway. At Manor Road the pipeline crosses under the railway and continues north through the Lake Zone adjacent to the east side of the railway. At the north of the Lake Zone the pipeline leaves the Site crossing under the railway and A421. This main does not presently service the Site, and it is likely that the main will need to be relocated locally to accommodate proposed highway layouts.

TELECOMMUNICATIONS

- 2.2.15. Openreach underground telecommunications cables are present along the boundaries of both sides of Woburn Road west of the West Gateway Zone (refer to drawing 320-1000-P-U-100, Constraint A). It is likely that these cables will need to be relocated within the vicinity and to accommodate the proposed highway junction and layout for the main west gateway access into the theme park.
- 2.2.16. Openreach underground telecommunications cables are present within Broadmead Road (refer to drawing 320-1000-P-U-100, Constraint D). Possible minor relocation or protection may be required to accommodate proposed Site access from Broadmead Road.
- 2.2.17. Within Manor Road Openreach underground and overhead Telecommunications are present and serve adjacent properties and businesses (refer to drawing 320-1000-P-U-100, Constraint F). These assets will likely require relocation to accommodate the proposed realignment of the highway.
- 2.2.18. An MBNL mobile telecommunications mast is located at the Cemex Bedford Plant on Manor Road. MBNL is jointly owned by mobile network operators EE and Three. The mast is located outside of the Site boundary and is not expected to be impacted by the Proposed Development.

2.3 HEALTH AND SAFETY EXECUTIVE

- 2.3.1. The Health and Safety Executive (HSE) has confirmed that part of Lake Zone lies within the consultation distance of a major hazard or major accident hazard pipeline and falls within the inner, middle, and outer land use planning consultation zones (refer to drawing 320-1000-P-U-100, Constraint G).
- 2.3.2. Further development areas and planned Ecological Enhancement Area will be located within the Lake Zone. Prior to development within the HSE area, UDX will be required to meet with the HSE to confirm that all Proposed Development within these areas complies with the applicable restrictions as set out in **Design Standard LZ4.1 (document Reference 6.3.0)**.

3 NEW UTILITY SUPPLIES

3.1 DETERMINING REQUIREMENTS

- 3.1.1. UDX has detailed expertise and experience relating to its developments around the world and have access to full historic and live operational utility use and demand data for their similar facilities.
- 3.1.2. UDX is supported by its consultant EXP U.S. Services, Inc. (EXP) on these existing developments and EXP have used the significant data available to provide a detailed, estimated load analysis for the Proposed Development.
- 3.1.3. The utility demands of the Proposed Development have been calculated based on its delivery being undertaken in two phases. The first phase, which is the requirement for construction, commissioning and testing of the theme park prior to Primary Phase Opening Year. The second phase is the requirement for the final planned Full Buildout, which includes estimates for the future development in the Lake Zone, West Gateway Zone, alongside planned expansion of the Core Zone.
- 3.1.4. Loads for proposed Electric Vehicle charging are included as part of the parking loads. A bus charging depot is included in the infrastructure design with approximately six-point five (6.5) megavolt amperes (MVA) provided for charging. It is assumed that the majority of bus charging will be overnight, therefore only a small portion (approximately 5%) of this demand is included as part of the peak demand loads.
- 3.1.5. Whilst to be refined during detailed design the analysis is considered a sufficiently robust assessment for feasibility and planning purposes, to assist in engagement with network operators in their evaluation of points of connection to local networks, availability of supplies, and the level of network reinforcement that may be required to achieve timely and suitable provision.
- 3.1.6. A summary of baseline utility loads for the two phases used for discussion with the statutory Undertakers is shown in **Table 3-1**, these loads are considered a maximum assessment, actual operational demand may be lower than shown in this assessment.

Table 3-1: New Supply Demands, High Level Summary

Summary	Electricity (kWe)	Total Water (m ³ /d)	Waste Water (m ³ /d)
Phase 1 Primary Phase Opening Year	37,000	3,900	3,000
Phase 2 Completion of Full Build Out	80,000	12,700	10,700

3.2 ENERGY STRATEGY AND ELECTRIFICATION OF HEAT AND COOLING

- 3.2.1. Consistent with current UK decarbonisation policy (please refer to **Energy Statement (Document Reference 6.9.0)** for further details) this utilities assessment is consistent with the development of low-carbon energy centres comprised of heat-pumps for heating and cooling generation, supported by electric boilers, high efficiency chilled water plant, and/or heating and cooling thermal stores. There may be future opportunities to utilise heat from 'recoverable' heat sources - such as surplus heat from industrial processes or energy-from-waste plants.
- 3.2.2. The **Energy Statement (Document Reference 6.9.0)** for the development considers several options for the generation of heating, hot water, and cooling, including but not limited to an external connection to an off-Site heat source, gas-based combustion, and low-carbon options. Solar panel water heating may also be considered in the future.
- 3.2.3. In order to inform the correct level of power needed for the Proposed Development, and hence, the load that should be applied for from the various statutory Undertakers, this utilities assessment considers an all-electric energy centre comprised of heat-pumps for heating and cooling generation, supported, as required, by electric boilers, a high efficiency chilled water plant, and heating and cooling thermal stores. However, temporary gas boilers remain as a supporting option for use up to one year after the Primary Phase Opening Year to ensure the Proposed Development can be served in the scenario that adequate electricity supply is not available.
- 3.2.4. The total requirement for electricity is therefore a combination of site electricity needs, plus the anticipated electrification for heating, hot water, and cooling. It should be noted that peak heating and cooling is not required concurrently and only the higher of the two loads is considered as part of the overall estimated load requirement.
- 3.2.5. Should an external waste heat source be determined to be technically and financially viable, this would also be considered; however, as such external heat source is unlikely to be guaranteed as available all year round, the electrical plant would still likely be required.
- 3.2.6. The total estimated electrical load is based on planned electrification of peak heat through replacing gas combustion with heat pump generated thermal energy.
- 3.2.7. With these factors applied the overall estimated diversified electricity demand equates to a peak demand of 80MVA.
- 3.2.8. The Proposed Development will require a small natural gas supply for special effects.

NETWORK OPERATOR LIAISON AND ROUTING

- 3.2.9. Statutory Undertakers have been approached regarding suitable points of connection (PoC) to their networks, to provide initial information on network capacity, and to initiate discussions to seek to identify any required off-Site reinforcement needed to upgrade the existing networks to provide any potential supplies.
- 3.2.10. A description of potential or preliminary new supply requirements, information obtained from the statutory Undertakers and indicative proposals are summarised below by service type. To the extent such works are off-Site then they do not form part of the Proposed Development.

- 3.2.11. The initial work to date has involved high-level desktop studies and is subject to further analysis, optioneering and negotiation and feasibility studies. The routing and designs for connections will be developed once planning approval is granted, with additional surveys and investigation to be undertaken to identify route options and support the design development and detail of selected final routes in consultation with each utility provider. This work cannot feasibly be completed until well after the timeline for submission of the planning proposal and expected receipt of a planning decision. As such, all utility routing is currently, and will remain, inchoate awaiting further investigation and design development.
- 3.2.12. All the off-Site utility works will be carried out on land outside UDX's current ownership and/or control.
- 3.2.13. In addition, to provide the certainty required to develop and settle the routing and detailed design of the off-Site utility works, planning permission for the Proposed Development will need to be granted. Once that has happened then such routing and detailed design will be progressed and so to the extent that planning permission is required for such off-Site works there will not be a simultaneous determination of any such future planning applications and the current planning proposal for the Proposed Development.

3.3 ELECTRICITY REQUIREMENTS

- 3.3.1. UKPN were appointed to undertake a feasibility study to assess how the electricity requirements will be provided by their infrastructure.
- 3.3.2. UKPN have considered several potentially viable options for points of connection as shown in **Figure 3-1**. The initial indication is that the UKPN minimum cost option may be connection at Marston Road 132kV/33kV grid substation which is located approximately 1.5km southwest of the West Gateway Zone, from which UKPN have confirmed 37MVA can be provided for the Proposed Development Primary Phase Opening Year.

Figure 3-1: Potential UKPN Points of Connection Locations Considered

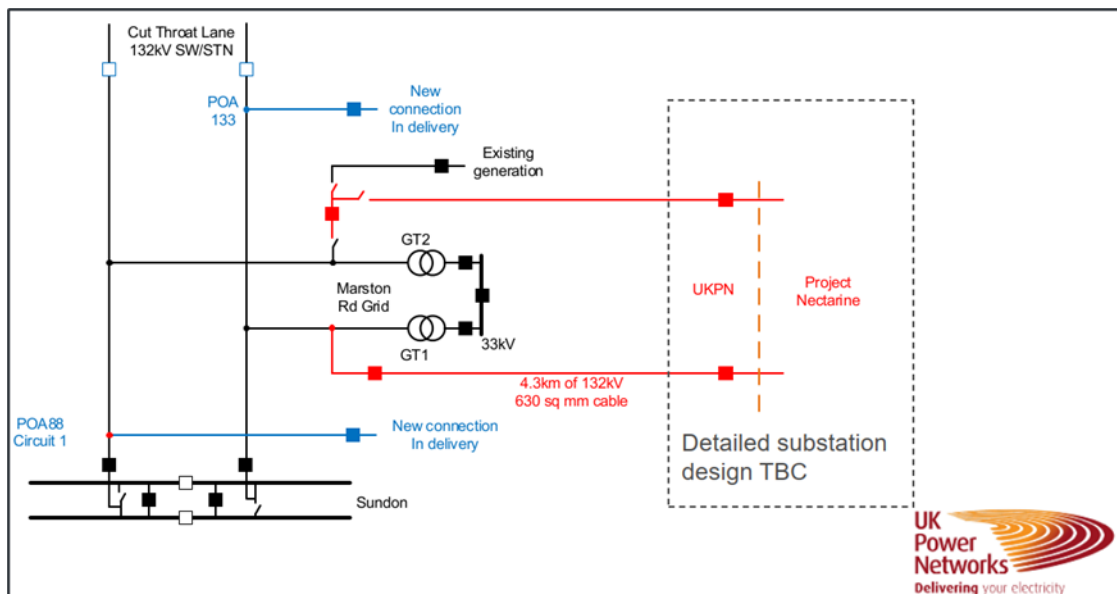


- 3.3.3. A new supply application has been made to UKPN for 37MVA and a respective formal new supply offer for 37MVA from UKPN has been accepted by UDX. Any electrical headroom within the 37MVA that may be available following the Primary Phase has the potential to contribute to serving or improving services to existing or future needs of other local development.
- 3.3.4. UKPN currently anticipate the following requirements to facilitate the load:
- Reinforcement works to Marston Road grid substation;
 - New 132kV circuits from Marston Road grid substation to the Proposed Development; and
 - New primary substation located in the Proposed Development.
- 3.3.5. This initial analysis identifies that 132kV capacity can be made available for the Proposed Development. Further detailed design studies will need to consider whether a 132kV to 11kV or 132kV to 33kV connection is the most appropriate.
- 3.3.6. The final design solution is inchoate, requiring further investigation and design development.
- 3.3.7. UKPN indicate that all distribution level works are considered business as usual and can be completed within the Project programme with 37MVA confirmed available for Primary Phase Opening Year.
- 3.3.8. UDX requires 100% redundancy of the electrical supply system. Risk on outage of the electrical system must be negligible. To provide this redundancy, two undergrounded 132kV electrical circuits are currently under consideration.

3.3.9. This is indicatively shown schematically in **Figure 3-2** with the on-Site 132kV primary substation expected to be constructed within the Lake Zone and two options will be considered as part of detailed design.

- Option 1: Installation of 132kV to 11kV transformers and distribution of power at 11kV to Lake Zone, Core Zone, and West Gateway Zone; or
- Option 2: Installation 132kV to 33kV transformers and distribution of power at 33kV to Lake Zone, Core Zone, and West Gateway Zone, with a subsequent additional 33kV to 11kV primary substation within each zone to step down to the 11kV local supply.

Figure 3-2: UKPN Indicative Schematic



- 3.3.10. Subject to further analysis and detailed design, there appears the potential for two new 132kV circuits to be installed from the Marston Road grid substation to the Proposed Development. Following planning approval, route identification will be carried out by UDX in conjunction with UKPN taking into account a range of factors. Additional surveys and investigation will be undertaken to identify preferred routes and support the design development and detail of selected final route(s). As such all routing is currently, and will remain, inchoate awaiting further investigation and design development as this work cannot feasibly be completed until well after the timeline for submission of the planning proposal, and expected receipt of a planning decision.
- 3.3.11. It is assumed that a directional drill crossing under the Marston Vale Railway Line will be required, at a location yet to be determined, and detail of the crossing arrangements will be coordinated with Network Rail as part of the detail design.
- 3.3.12. UKPN will provide temporary building supplies from the local network with exact locations and connection details to be determined and agreed.

- 3.3.13. The maximum electricity import requirement for Full Buildout is 80MVA. Following resolution of the 37MVA, UKPN will work with UDX to identify a strategic plan to provide the additional capacity (increasing from 37MVA to 80MVA) that may be needed for the Proposed Development, which could include servicing the site from multiple locations. UKPN will work with UDX in line with the programme to establish the delivery strategy including determining the connection option(s) and respective potential routes to the Site.

3.4 BATTERY ENERGY STORAGE SYSTEM

- 3.4.1. A Battery Energy Storage System (BESS) is being considered for the Proposed Development to provide reliable backup power during emergencies, to reduce energy costs through load shifting, and to enhance the integration of prospective renewable energy technologies, thereby improving overall energy efficiency and resilience for the development. Any proposed BESS would be installed and co-located within a dedicated utilities compound along with the primary substation and energy centre.
- 3.4.2. Whilst to be confirmed during detailed design, the nominal size of the proposed BESS is estimated to be no more than 10MVA. Considered at five x 2MVA storage units, this load would provide for emergency power for 50% of the estimated operational load of the Core Zone.
- 3.4.3. The proposed BESS would enable emergency power provision to the Core Zone however, further analysis and detailed design will be needed to establish whether two dedicated HV circuits, each sized at 8MVA, are best used to distribute emergency power to the Core Zone, or whether the BESS will be linked into the normal HV operational circuit.

3.5 NATURAL GAS REQUIREMENTS

- 3.5.1. As described in Section 3.2, this Utilities Statement sets out the infrastructure needed to provide heating and hot water needs and considers an all-electric energy centre.
- 3.5.2. A small natural gas supply is required for special effects loads. A connection to the existing Indigo Pipelines asset located in Manor Road may be sufficient to meet these supply requirements. Should this connection not be available, natural gas for special effects will potentially be provided by other sources such as a separately charged local propane tank installed in compliance with all required local guidance and regulations. This will be settled through further analysis and then detail design in due course.
- 3.5.3. Until the energisation of the primary substation and completion of the Site energy centre, temporary natural gas boilers may be used for any heating and hot-water generation during construction phases and remain as a supporting option for use up to one year after the Primary Phase Opening Year to ensure the Proposed Development can be served in the scenario that adequate electricity supply is not available.
- 3.5.4. Determination on any required gas point of connection and routing will be confirmed post planning approval during the detail design process.

3.6 POTABLE WATER REQUIREMENTS

- 3.6.1. The estimated requirement for water supply to meet the Primary Phase is 3.9ML/d, increasing to 12.7ML/d by for Full Buildout as shown in **Table 3-2**. These volumes include potable water and flushing water (domestic water); and irrigation, washdown and cooling (process water). Please refer to **Chapter 12: Water Resources (Volume 1)** of the ES (**Document Reference 2.12.0**) for a further description on how process water demands will be met for the Proposed Development.
- 3.6.2. Potable requirements are estimated to be 1.1ML/d and 6.5ML/d for the Primary Phase and Full Buildout, respectively. Anglian Water has a statutory obligation to provide all potable and flushing water supplies (i.e., the water used for domestic purposes). Whilst this equates to a total of 3.1ML/d for Primary Phase Opening Year and 11.1ML/d for Full Buildout, the Proposed Development will look to reduce the water demand for flushing as far as is practicable. Please refer to **Appendix 12.2: Water Strategy (Volume 3)** of the ES (**Document Reference 4.12.2.0**).
- 3.6.3. Anglian Water have indicated that they are not permitted to provide water for process use which includes water for irrigation and washdown use. These demands will be met via the use and management of on-Site water resources.
- 3.6.4. Anglian Water were appointed to undertake a pre-planning assessment report on the supply of water to the Proposed Development. The results of the Anglian Water modelling assessment confirm two (2) potential points of connection:
 - Bedford, Manton Lane Reservoir via connection to the Anglian Water 630mm PE main located at the A6 Cemetery Road junction (TL0135247633).
 - Ampthill Reservoir via connection to the Anglian Water 750mm steel main near that location (TL0268444684).
- 3.6.5. In addition to the above potable water estimates, there is a need for additional 'resilience' for the domestic water requirements. The increased supply to provide 'resilience' could be satisfied utilising either or both of the potential new supply connections identified by AW, or additional connection(s), or on-Site water resources. Connections and routing will be confirmed post planning approval following further analysis and then during the detail design process. It is assumed that a directional drill crossing under the Marston Vale Railway Line will be required, at a location yet to be determined, and detail of the crossing arrangements will be coordinated with Network Rail as part of the detail design.
- 3.6.6. The final design solution and connection route(s) are inchoate awaiting further investigation and design development.
- 3.6.7. Anglian Water have confirmed their statutory obligation to provide the domestic water infrastructure and that they have an existing program to upgrade water resources in the region by 65ML/d. Anglian Water have also provided a statement of support in meeting all requirements of domestic water supply for the Proposed Development and to work with the UDX team to appropriately design and construct the supporting infrastructure.
- 3.6.8. On-Site water resources will be treated to required quality standards through the proposed Water Processing and Treatment and Collection Facilities in the Lake Zone.

- 3.6.9. The on-Site Water Processing and Treatment and Collection Facilities are currently planned to be designed for a nominal 3.5ML/d and will utilise collected water and recycled water to meet projected process water and potentially partial potable water demands. This, when combined with the Anglian Water supply, will meet the full estimated 12.7ML/d requirement.
- 3.6.10. Please refer to **Chapter 12: Water Resources (Volume 1)** of the **(Document Reference 2.12.0)** for a further description on how process water demands will be met for the Proposed Development.

Table 3-2: Water Supply Requirements

Summary	Potable ML/d	Flushing ML/d	Irrigation ML/d	Washdown ML/d	Total ML/d
Phase 1 Primary Phase Opening Year	1.1	2.0	0.6	0.2	3.9
Phase 2 Completion of Full Build Out	6.5	4.6	1.4	0.2	12.7

3.7 FOUL WATER REQUIREMENTS

- 3.7.1. Anglian Water have been appointed to undertake a feasibility study on the availability of wastewater services to the Proposed Development.
- 3.7.2. Anglian Water have confirmed their statutory obligation to provide the foul sewerage infrastructure to serve domestic flows from the Proposed Development.
- 3.7.3. Anglian Water have identified a point of connection to the receiving sewerage network to meet the domestic foul water drainage requirements, which is located at Anglian Water manhole 1301 located to the Northwest of the Site adjacent to the A421 (TL0312846311). The Anglian Water high-level assessment is based on flows connecting to a sustainable point of connection on the foul network. No detailed investigation has been undertaken to determine if a more appropriate point of connection is available, and the final point of connection location and connection strategy is awaiting further investigation and design development.
- 3.7.4. It is currently envisaged that on-Site foul drainage would be able to connect to a strategic foul main running north through the Lake Zone to a proposed foul water terminal pumping station located in the Lake Zone, before being pumped to the Anglian Water point of connection. Whilst currently inchoate the exact routing will be confirmed post proposal approval during the detail design process. It is assumed that a directional drill crossing under the A421 will be required, at a location yet to be determined, with connection and delivery strategies to be determined and developed as part of the detail design. Final design and routing are currently, and will remain, inchoate awaiting further investigation and design development.
- 3.7.5. Detailed design works will dictate the exact system requirements, but for the purposes of this assessment, it is envisaged that it will primarily be a gravity system, with gravity flow within the West Gateway Zone, East Gateway Zone, Core Zone and Lake Zone being collected at various low points in each Zone and then, where required, pumped to the strategic main in the Lake Zone.

WATER RECYCLING CENTRE

- 3.7.6. The foul drainage from the Proposed Development is in the catchment of Bedford Water Recycling Centre (WRC), which does not have existing capacity to treat the flows from the Site.
- 3.7.7. Anglian Water is obligated to accept the domestic foul flows with the benefit of planning consent and have committed to take all necessary steps to ensure that there is sufficient treatment capacity available on the Proposed Development timeline.

WATER RESOURCES MANAGEMENT

- 3.7.8. As described previously (and more fully within **Appendix 12.2: Water Strategy (Volume 3)** of the ES (**Document Reference 4.12.0**)) UDX has committed to a program to minimise water usage through collection of on-Site water resources, be that rainwater run-off, lake abstraction, water recycling or possible use of borehole abstraction. This water will be collectively treated and utilised for demands on the development.
- 3.7.9. Whilst the Proposed Development will utilise on-Site water resources, the water treatment processes used to treat the water to enable it to be safely used will produce a residual process sludge from filtration and/or chemical treatment that will require disposal.
- 3.7.10. A determination will be made with Anglian Water over either discharge of this process sludge to the foul sewer as a trade effluent, or for direct disposal into the Bedford WRC.

CONSTRUCTION LOAD

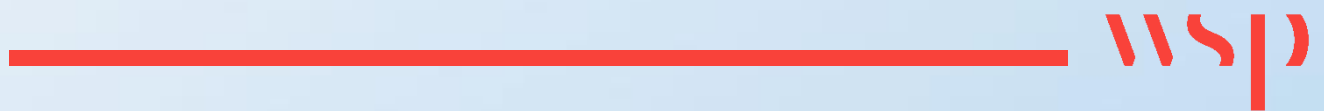
- 3.7.11. Whilst the focus for the feasibility study has been on water and wastewater demands for full operations, Anglian Water has stated that local resources are available to ensure both potable water and foul discharge capacity are available during construction.
- 3.7.12. At maximum construction activity, the Proposed Development estimates c. 5,300 personnel may be on-Site. Details around points of connection and discharge to local infrastructure to enable this demand are under continuing discussion and are therefore subject to further agreement on location and design.
- 3.7.13. It is expected that this smaller connection, nominally estimated at 0.15ML/d, will be maintained, post construction, as part of the additional 'resilience' for the domestic potable water requirements for theme park operations within the Core Zone.

4 CONCLUSIONS AND SUMMARY

- 4.1.1. The information provided in this Utilities Statement supports the planning proposal to be submitted by UDX for the Proposed Development. It provides detail on the current, but evolving, strategy for addressing the Proposed Development's utility requirements, including expectations for both utility availability and indicative points of supply.
- 4.1.2. UDX are also liaising with Anglian Water and UKPN to capture respective discussions to date, any agreed matters as well as any matters for further collaboration and agreement in a Summary of Agreed Position (SoAP). Where obtained these will be included in **Appendix 4: Summaries of Agreed Positions with Statutory Consultees** of the **Planning Statement (Document Reference 6.1.4.0)**.
- 4.1.3. The utilities strategy is consistent with the intention to deliver a low-carbon strategy and explore future opportunities such as utilising 'recoverable' energy whilst maintaining needed flexibility to ensure security of supply, transitional phasing, and delivery of Site services.
- 4.1.4. This statement also sets out the currently projected utility demands of the Proposed Development for the two-phase delivery of Primary Phase Opening Year (construction, commissioning and testing of the ERC) and Full Buildout. Estimated temporary utility and construction requirements are also addressed. Statutory Undertakers and utility companies have been engaged and the strategy for provision of new supplies has been identified and described so far as possible at the current stage. Following planning consent route identification will be carried out by UDX in conjunction with the statutory Undertakers and utility companies taking into account a range of factors. Additional surveys and investigation will be undertaken to identify preferred options for utility supplies and support the design development and detail of selected final routes. As such all routing is currently, and will remain, inchoate awaiting further investigation and design development.

Appendix A

EXISTING UTILITIES PLAN





WSP House
70 Chancery Lane
London
WC2A 1AF

wsp.com

PUBLIC