

# PROPOSED REDEVELOPMENT

LINK PARK HEATHROW THORNEY MILL ROAD UB7 7EZ



OUTLINE PLANNING APPLICATION  
DESIGN and ACCESS STATEMENT  
December 2020

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## 1.1 Purpose of this Statement

This Statement is submitted in support of an outline planning application to inform Buckinghamshire Council and the London Borough of Hillingdon regarding the planning application for the redevelopment of Link Park Heathrow. The description of the development is outline planning permission with the details of access, appearance, landscaping, layout and scale reserved for later determination. Demolition and redevelopment to comprise a data centre (Use Class B8 (Data Centre) or sui generis (Data Centre) of up to 55,000sqm (GEA) including ancillary offices, internal plant and equipment and substation. In addition to the above the Development may also include: car parking; provision of external plant and equipment and fuel storage; creation of servicing areas and provision of associated services, including waste, refuse, cycle storage and lighting; and for the laying out of the buildings; routes and open spaces within the development; realignment of railhead; and all associated and ancillary works and operations including but not limited to: demolition; earthworks; provision of attenuation infrastructure, engineering operations.

## 1.2 Preamble

Since the 1960s a continuous switch from paper to electronic digital format has been growing at an exponential rate. Computing, originally restricted to large machines in research establishments, has been transformed by developing technology, followed by the advent of the internet, and manufacturing advances, into a global, portable, main consumption activity. Today, government, business and lifestyle pursuits rely heavily on computing for communications, transactions and information storage. With the creation of fibre optic networks in the 1990s and a choice between owner occupier and rented (hosted) storage of digital information, data centres have become a critical fabric of modern society and the built environment.

Since 9/11 and the Basel Accord of 2003, business continuity and greater regulatory, emphasis has been placed on public and private organisations to securely store and provide access to data. London, being at the heart of the global finance industry and a world city, has a significant concentration of data centres and will need more capacity to keep pace with justifiable demand for storage space.

Ten years ago, data centres could be located in office or logistic buildings; however, today this is no longer an option due to advances in technology processes, equipment, and energy

consumption. This poses challenges to designers and planners to create, approve and realise a new architectural typology of building that is attractive, innovative, technically flexible, operationally efficient and environmentally orientated in its construction and context.

Site availability and access to the required amount of electrical power in London is becoming increasingly difficult and the growing need for new, high density data centres will need to be met on sites outside of London. Because of the existing data connectivity corridor created along the route of the Grand Union Canal and the GWR rail track into London, a 'golden corridor' is available, running east from Slough into the city of London, and beyond into London Docklands. The application site is situated in this corridor and has good access to the required electrical supply from the Iver substation.

### 1.3 Content of this Statement

This Statement includes the following information in support of the outline planning application:

- An analysis of the application site and the context which has informed the design,
- A4 reduced size copies of the outline design development drawings that are submitted with this application.
- A description of the proposed buildings, their massing and form
- An indicative palette of materials that will be used in the ongoing design development
- An indication of the access that will be provided to the new building
- Provision of an illustrative scheme, setting out what the development could look like
- Details of an outline lighting strategy
- Details of Secure by Design
- A statement regarding access and inclusive design

### 1.4 Executive Summary

- The application site comprises 4.7 hectares (11.7 acres) of previously developed land, currently with B8 Class Use and occupied by a single large, open storage shed, and other small storage units and containers
- The application site adjoins an area of land to the east, partly landscaped with a plantation of poplar trees (8.8 acres), and partly a natural woodland (13.4 acres). All of this land is in the ownership of the applicant but does not form part of the proposed development.
- 1.7 acres of the application site, along the eastern boundary, is within the London Borough of Hillingdon. The natural woodland is entirely within the London Borough as is approximately one third of the poplar plantation
- Adjoining the application site to the west is the railway branch line from West Drayton, joining the national railway network to the north of the site. From this branch line is a railhead connection that occupies a part of the application site.
- The application site is within the Metropolitan Green Belt, albeit that the site is 'brownfield' with an established B8 use.
- The applicant has provided a clear brief for their requirements to develop the site as a data centre
- Pre-application discussions with the Buckinghamshire Council have confirmed that the proposals are inappropriate development in the green belt, although it recognises that there are compelling very special circumstances that, on balance, the Council can support a development of this nature.
- Pre-application discussions with LPA has confirmed that the proposed scale, height and mass of the proposed building is appropriate
- The proposed data centre is entirely appropriate to the site, its local and wider context, and:

- a. Has taken planning policy into consideration
- b. Sits comfortably on the site
- c. Provides a much-needed facility for the local and UK economy
- Sufficient car parking can be provided for the building end user requirements, set well into the site and away from the public domain view of the site
- Sufficient provision can be made for parking suitable for disabled visitors and workers
- Access to the site will be in approximately the same location as the existing roadway from the highway
- The proposed use of the site will have a drastically reduced vehicle and HGV movement compared with the existing use
- The site boundary treatment will provide the security required to operate a data centre
- The proposed buildings will aim to achieve BREEAM Excellent

## 2. Project Background

### 2.1 Applicant's Operational Statement

Link Park Heathrow LLP is seeking to achieve outline planning permission, with all matters reserved, for data centre use. Outline planning permission is sought as this allows the flexibility for the end user to seek approval for detailed design, tailored to its requirements.

This outline application has been prepared by an experienced team of consultants and provides a parameter based scheme design that can be adapted to allow a specific design to be brought forward.

### 2.2 Planning History of Link Park Heathrow

Buckinghamshire County Council granted planning permission in 1981 to Bardon Hill Aggregates for the importation and storage of aggregates by railhead, and for processing those aggregates to create roadstone, with no limitation on HGV traffic movements to and from the site.

Aggregate Industries acquired the site and continued the movement of aggregates to, and export of roadstone from the site until 2014, when Link Park Heathrow (LPH) acquired the site.

Since acquiring the cleaned site, LPH have let parts of the site to a variety of companies for a range of industrial uses. There is at present no restriction on the number of HGV movements, nor routing of these movements.

In September 2019 SBDC resolved to grant permission for use as open storage of that part of the site which fell within their jurisdiction (ref.17/02353/FUL). The resolution is subject to the completion of S106 Agreement relating inter alia to the number and routeing of HGVs.

In May 2020 LB Hillingdon granted certificates of lawfulness for the small part of the site on the east side which lies within their borough. The certificates relate to use of the land as storage and the retention of a security fence along the boundary of the site (ref. 73420/APP/2020/1076 and 1042 respectively).



Image showing delivery by rail and HGV.



Image of Aggregate Industries



Image showing structures on site before demolition and decontamination by Aggregate Industries

## 3. Site Analysis

### 3.1 Site Location and Context



*Aerial view of showing Site Location*

The application site of Link Park Heathrow that forms this outline planning application is situated on the Buckinghamshire-Hillingdon boundary, with 1.7 acres (of a total site area of 11.7 acres) of the application site being within Hillingdon. The site is within the Metropolitan Green Belt area of Iver, being 0.3 miles from the centre of the small settlement of Thorney, and a similar distance to the boundary of West Drayton. There is access to the Great Western railway network at Iver station, 1 mile to the west and West Drayton a similar distance to the East.



*View of site entrance from Thorney Mill Road*

The site is fenced on all boundaries with a steel security fence of 2.5m height, with a sliding security gate across the access on the narrow southern boundary.

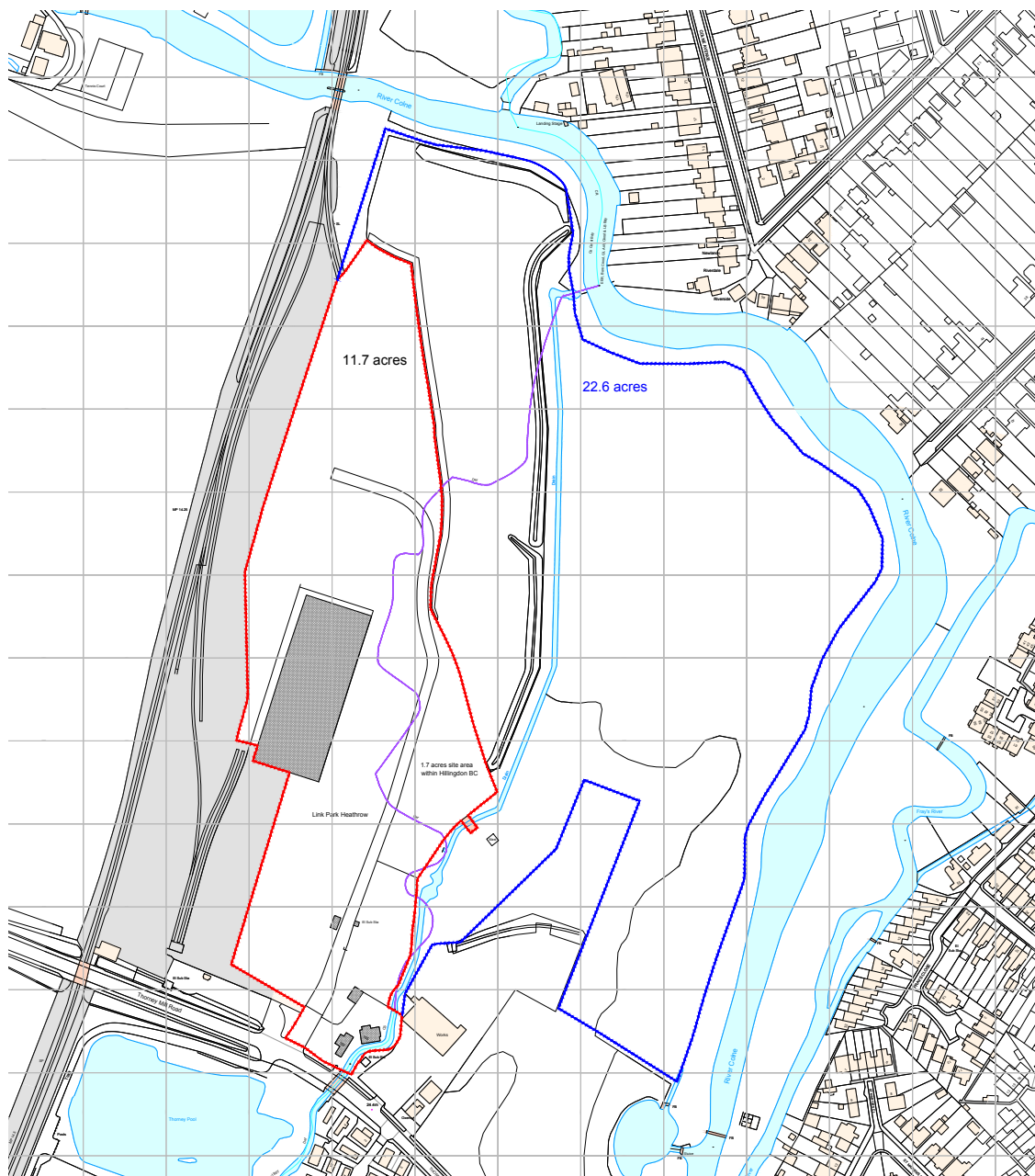
Beyond the boundary to the west is the railway branch line from the old Colnbrook Station 1 mile to the south of the site, running northwards to join the main railway network at West Drayton. This

track has been closed to passenger transport since 1965 but has continued in use for goods traffic, particularly for the aggregate industry.

To the north and northwest of the site is a poplar tree plantation, on land that is in the applicant's ownership. The trees were planted more than 20 years ago, to provide screening of the aggregate process on the site from the housing areas beyond. These trees are separated from natural woodland further to the east by Bigley Ditch that runs from the River Colne into Thorney Pool to the south of the application site.

The southern half of the east boundary is shared with an industrial site on the other side of Bigley Ditch. This adjoining site has a single commercial building used for a vehicle rental business, the major portion of the site being open car and van parking.

The site boundary to the south is set back from Thorney Mill Road by 30m, and has an access roadway off Thorney Mill Road, shared with the adjoining railhead site to the west. This adjoining site to the south west of the application site has a railway siding from the branch line which is used for transfer of aggregate from goods trains to the road network.



OS sheet showing site boundary and Local Context

The application site is of brownfield land that is mostly hard surfaced. It has B8 use with a single building, open sided shed of approximately 4,300m<sup>2</sup>. In the southwest corner of the site is an area

of approximately 0.4 acres that is occupied by two single storey dwellings: numbers 153 and 155 Thorney Mill Road. These properties are in the ownership of the applicant. All buildings on the application site will be demolished to enable the construction of the proposed new data centre.

### 3.2 Local Context



*Aerial view of site looking south*

The local context of the application site is defined by the M25 to the west, the M4 to the south, by the River Colne and the residential fringe of West Drayton to the east and the Great Western rail track to the north. This area is crossed by Thorney Mill Road running east-west through the centre of the defined area. This road joins Langley in the west, to West Drayton in the east, and it provides access to the site. It is a rural, single carriageway that runs through small towns and villages, being 7.5m width across the front of the application site.



*Thorney Mill Road where it passes the southern boundary of the application site*

The local context is defined by open countryside to the west and south and by the outskirts of West Drayton to the northeast.

Adjoining the site to the east, along two thirds of the eastern boundary is the plantation of poplar trees described previously, separated from an area of natural woodland by Bigley Ditch. The

southerly third of the eastern boundary is across the county boundary, into the London Borough of Hillingdon (LBH), with the boundary line following Bigley Ditch.

This natural woodland is in the ownership of the applicant, but the land does not form part of this application. The River Colne divides into two sections through the woodland to form an area designated as Frays Island Nature Reserve (the divergent river was created to feed watermills, historically). This is part of the Colne Valley National Park. The woodland has been described as an area of biodiversity in a Walkover Report by LUC (Land Use Consultants).

To the west of the site, beyond the branch railway track is Thorney Park Golf Club. It is situated on rising ground, leaving the application site in a natural valley formed by the River Colne. The golf course and club house are approached by a lane leading from Thorney Mill Road. Across the centre of the golf course, is a lane leading to Thorney Park, a recent, courtyard, residential development. This lane continues further north to the old building of Thorney Weir House, now surrounded by a small industrial estate bordering onto the GWR rail track and the perimeter housing of West Drayton.

The golf course stretches north from Thorney Mill Road, wrapping around the small settlement of Thorney that has developed along the road frontage. The course extends to the west and borders the M25, on the section between the M4 and the M40.



*The settlement of Thorney situated to the west of the application site*

As previously described, Thorney Mill Road runs through the centre of what is defined here as the local context. Beyond this road, the River Colne continues to run south, with a series of lakes on the western banks. These lakes occupy an area extending to the M4, with a small industrial estate between the lakes and the motorway, accessed by Cricklewood Road running south from Thorney Mill Road.

Immediately to the south of the application site is the Riverside Park caravan site, situated between the River Colne, Thorney Pool and Maryfields Lake.



*Aerial view of Riverside Park Caravan Site to south of application site*

The southeastern sector of the local context is occupied by a mixture of open fields and woodland, surrounding the 'Colne Park Caravan Site'. To the east of this area is the southwestern residential fringe of West Drayton.



*Colne Park caravan site and the outskirts of West Drayton*

Thorney Mill Road continues east from the site frontage into West Drayton. Facing onto this road at the entry into West Drayton is the Old Mill House, built on the bridge over the River Colne. This Georgian building has been extended along the street frontage with recent 4 storey residential terraced properties.



*Old Mill House on Thorney Mill Road bridge over the River Colne*

### **3.3 Wider Context**

The wider context follows the pattern of open land, woodland, with areas of lake, mixed with larger residential areas and towns.

The area to the west is of a more rural nature that typifies this part of Buckinghamshire, with the small town of Richings Park, separated from the larger commuter town of Langley by agricultural land and open parkland. Beyond Langley is the large town of Slough having a range of housing types, shopping precincts, headquarter office developments and industrial estates (including data centre buildings).

Immediately to the east, as described in the Local Context is the London Borough of Hillingdon, with West Drayton adjoining the surrounds of the application site. Although the housing of West Drayton is described here in the Wider context (the River Colne and the surrounding woodland defining the boundary of the local context), its location and proximity to the site is an important

factor in analysing the site. Because of the dense tree planting there is little visibility of the site from the areas of housing.



View from Colne Avenue West Drayton towards the application site

Beyond West Drayton is Stockley Park and Hayes, forming the western outskirts of London.

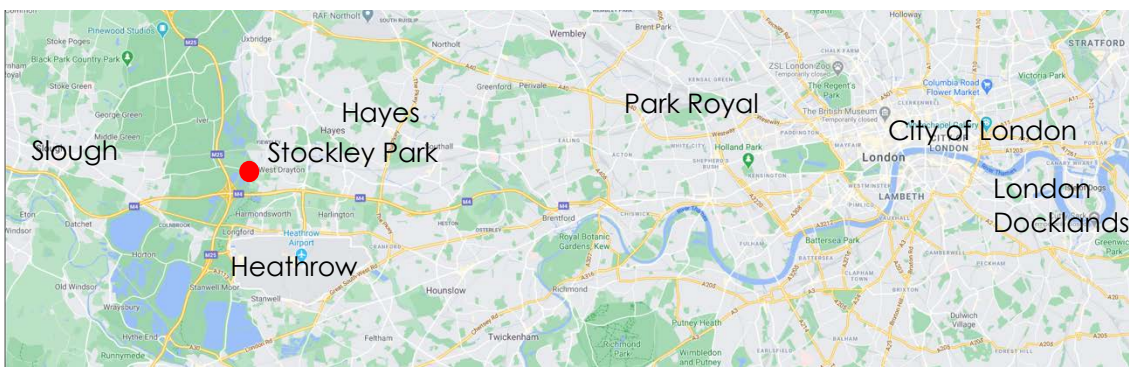


Aerial view of application site looking west from West Drayton

To the north are the defined settlements of Iver, Gerrards, Cross, and Chalfont (St Giles and St Peters), separated by areas of open countryside and smaller settlements between (Fulmer, Denham, Wexham).

Part of the wider context is the communication network that surrounds the site. These have been identified as defining the borders of the local context and provide excellent links with London to the east and Slough to the west; the 'golden corridor' linking data centre hubs and data fibre connections running through from Slough, Hayes, Stokely Park, Park Royal the City of London and to London Docklands. The GWR link from the west country provides the route for main data connectivity, as does the Grand Union Canal running from west to east three quarters of a mile to the north of the application site.

Heathrow airport is 4 miles to the south of the site, 15 minutes journey by car. Data centres provide an international service with end users based not only in the UK, but mainland Europe, USA, and the far east. Easy access to the application site is critical for its use as a data centre.



Map showing the 'Golden Corridor' of data centre hubs

### 3.4 Social and Economic Context

Construction of a development of this size will provide a boost to employment of local construction labour and the local economy and as a whole will benefit over a number of years with the expectation of long-term maintenance contracts that will be put in place.

The redevelopment of the site as a data storage facility on an existing industrial site will be a high technology development requiring a cross-section of skills to ensure that the facilities are well run. In-house employment will include managers, technical staff, maintenance technicians, administration, security, and cleaners. External employment will include the delivery of differing maintenance requirements of the various electrical, mechanical and IT plant and equipment. The other major employment benefits from a data centre are the indirect jobs that are created through the services provided by data storage and processing whereby UK-plc has become dependent on the provision of data centres.

### 3.5 Infrastructure

As described previously in this statement, the two main infrastructure requirements of a Data Centre are high levels of electrical power, and diverse access to fibre optic data cable. These can be provided for the application site from the Iver National Grid substation and the telecommunications fibre connections that follow the Grand Union Canal and the GWR Railway Line.



One type of cooling envisaged for this proposed sustainable project is water for adiabatic cooling of the IT racks and chilled water from rooftop chillers for electrical switch rooms. The end user will develop their design and cooling technology, to be submitted as part of a reserved matters application

Unlike the current site industrial use, the number of private car movements required for a data centre is relatively small. During the initial fit-out of the data halls, after construction work of the building is completed, there will be a need for heavy vehicle deliveries of electrical and mechanical equipment, as well as computer equipment. The existing access road to the site is adequate for this although the location may be moved further east to improve vehicle movements into and out of the site.

### 3.6 Geotechnical/Contamination

The application site was previously owned by Aggregate Industries and continued the movement of aggregates to, and export of roadstone from the site until 2014. It was then acquired by the applicant, but before vacating the site, Aggregate Industries demolished the majority of the buildings, removed the machinery and decontaminated the site.

A Geotechnical Desk Study (including a preliminary Contamination Risk Study) is submitted as part of this outline planning application.

### **3.7 Flood Risk Assessment**

Because of the critical systems that are required for a data centre to operate, the risk of flooding is a crucial factor to be considered when identifying a suitable site. The Environment Agency FRA Map shows the site to be in Flood Zone 1. There are areas of the site along the eastern boundary within Flood Risk Zone 3. But this does not intrude into the site.

A Flood Risk Assessment is submitted as part of this outline planning application.

### **3.8 Environmental Analysis**

Adjoining the proposed development area of the client's overall site is an area of woodland with ecological value. This has been described in the site Walkover Report prepared by LUC (Land Use Consultants).

Before detailed design is progressed as part of reserved matters, a full Environmental Impact Assessment will inform the development of a design for the site to ensure the impact of development will be minimised. The preliminary layout that is shown in this Statement is based on all buildings contained within the area of land that was decontaminated by Aggregate Industries in 2014, with minimal removal of the existing trees along the site boundary line. Any trees that do need to be removed to allow the construction process will be replaced, with additional tree and shrub planting within the site boundary.

### **3.9 Existing Railhead**

The western boundary of the Application Site adjoins railway sidings. The sidings are connected to a railway that runs north to West Drayton and the national rail network. The sidings have historically been used for importation of aggregates from other parts of the country. The aggregate operation on the Application Site currently imports asphalt. The Application Site is safeguarded as an Aggregate Rail Depot Site. The railhead will be re-provided adjacent to the Application Site to ensure the continued use by Network Rail.

### **3.10 Site Opportunities**

Link Park was in use for importing and storing of aggregates from the 1980s, with unlimited vehicle movements. It has more recently developed as an industrial site and now has a planning consent for open storage, subject to s106 agreement. The site is in a good business location, being close to London, the M25, Heathrow Airport, and good national rail links.

Because of the restrictive road network for HGV and large numbers of other vehicle movements, the site provides an ideal opportunity for a commercial use that makes less demand on the local road network; a data centre being the most appropriate use.

Data centres are classified by the UK government as "UK critical infrastructure" and represent a key growth sector for the UK economy into the future. Within the UK the Hayes to Slough Golden Corridor is critical (identified above).

The traditional data centre capital of Slough is now reaching maximum capacity. In light of Buckinghamshire's location, it has the potential to become a key future data centre cluster to cater for the growth in the data centre economy that can no longer be accommodated in Slough and reap the rewards on offer.

Within Buckinghamshire, the corridor running alongside the M4/Grand Union Canal and in the vicinity of the Iwer power station provides the ideal focus for the new data centre cluster. Link Park lies at the centre of this corridor and therefore represents a highly sought after and important potential data centre site. The known demand for data centres is at least 7-8 sites and means if

Buckinghamshire is to take advantage of the data centre economy then it will need to find sites. Link Park is one of the best locations in Buckinghamshire to deliver a data centre use.

The following points will exemplify this proposal:

- Proximity to the City of London and London Docklands
- Proximity to road rail and air flight networks
- Availability of electrical and data infrastructure
- Precedent of existing development on site
- Sufficient area of site for large building development
- Good screening of development area by existing woodland
- The opportunity to replace redundant use of site with building type in great demand

## 4. Consultation

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### 4.1 Pre Application meeting with Local Planning Authorities

Pre-application meetings have been held with Buckinghamshire and Hillingdon Councils but no

### 4.2 Consultation Process

The following shows the process that has led the consultation:

- Ensure key local stakeholders were informed of the development plans
- Raise awareness of the proposals among local residents
- Deliver an 'at-distance' engagement facility
- Use a range of methods to ensure the consultation has wide reach
- Ensure that key information about the proposals was made available
- Create a clear and ongoing line of communication
- Deliver a consultation with stakeholders, residents, businesses together with representatives of the local authorities

### 4.3 Report on the Consultation Process

Full documentation on this consultation process is provided in a Statement of Community Involvement (SCI) report that is included in this outline application.

### 4.4 Feedback

The feedback that is reported in the SCI has been taken on board by the design team and informed the scheme proposals that are included in this outline application

## 5. Design: Outline Proposal

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### 5.1 Design

The design of the proposed new buildings has been developed in accordance with the client brief and to meet client requirements in providing a data centre. The design is informed by site analysis including noise, ecology, traffic, energy and air quality assessments and pre-application discussions with the LPA proposals together with Public Consultation.

### 5.2 Relocation of the Railhead

The existing railhead currently runs through the middle of the development site is restricts the potential for development on the site for a purpose not requiring transport of materials by rail. It is proposed that this railhead will be re-provided adjacent to the Application Site to ensure the continued use by Network Rail, using the land to the west of the site.

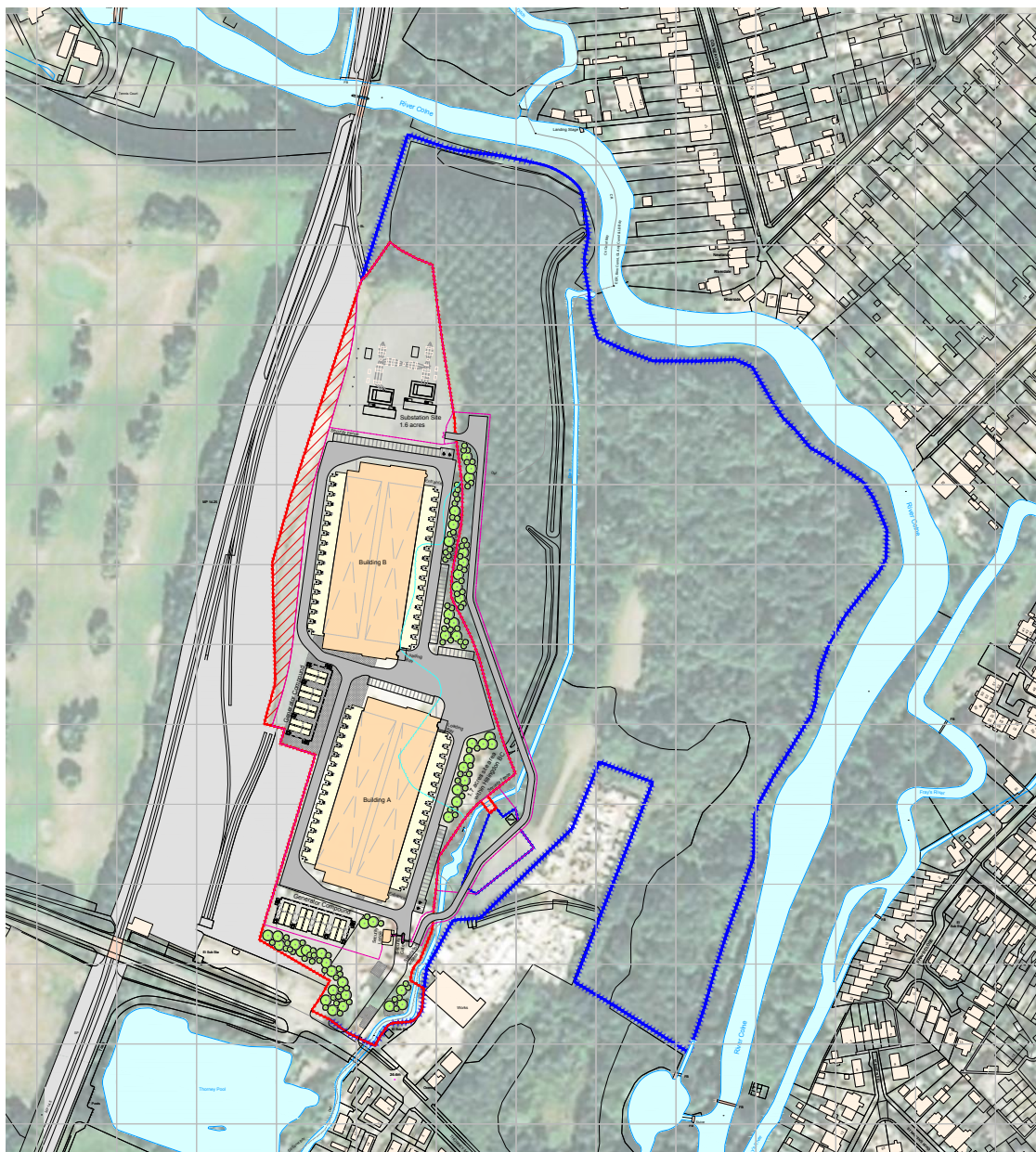
### 5.3 Massing and Form

The data centre building type is essentially industrial, to house technical processing equipment, with support functions. The IT processing equipment is sensitive to environmental conditions and requires dedicated plant including cooling, uninterrupted power supplies with standby generators, distribution of data from incoming fibre optic cables, and security installations to control access to the building. The building form will follow these functional requirements.

The illustrative scheme that has formed the basis for the parameter plans will provide a minimum of eight data halls, each of approximately 2,000m<sup>2</sup>. The type of cooling for the IT equipment appropriate for this design would be adiabatic indirect air-cooling units (IAC), forcing cold air into the data halls at each floor level. Chilled water cooling will be required for the electrical plant areas and an external plant compound is proposed for this, at roof level. The backup generators that are required are proposed within acoustically attenuated enclosures, separate from the main building structure.

To maximise the opportunity for development of this site, with its restrictive width to length plot ratio, the development shown in the illustrative scheme is proposed to be two separate data centre buildings, constructed to a maximum height of 25m above ground level (51m AOD). With the rising land to the west of the site and the dense covering of trees to the east and north of the site, this height and mass of the building would only been seen from Thorney Mill Road, at the narrow frontage of the site.

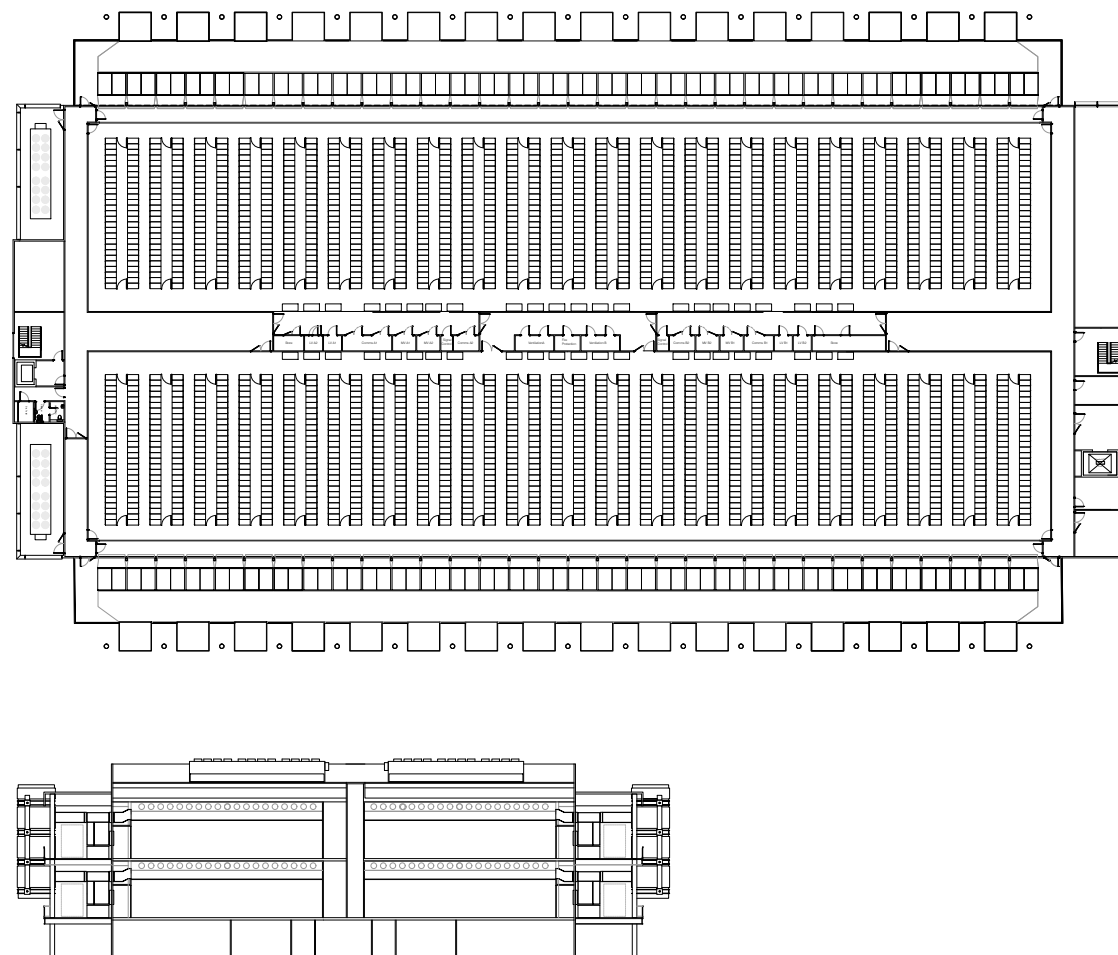
The site layout below shows the illustrative data centre design:



Site plan showing illustrative building layout

## 5.4 Plan Form

The plan form of the proposed data centre is driven by the functional requirements described above. The proposed cooling by IAC units is accomplished by providing an external gantry at each data hall floor level to support the units ranged along one side of the hall. The dynamics of this cooling require a data hall that has limited depth, to ensure cold air movement across the range of IT equipment, and a greater length to allow provision of sufficient number and size of cooling units to meet the requirements of the IT power load. The resultant plan form provides a building proportion that fits the site. Electrical and mechanical infrastructure rooms will be grouped on floor levels between the data hall floors, as shown in the typical section drawing. The following drawings show a typical data hall floor and section of the illustrative scheme:



*Plan and typical section drawings of illustrative scheme design*

## 5.5 Facades

As the design is developed for the reserved matter application the elevational treatment will be detailed. As shown in the section drawing the electrical and mechanical equipment rooms are proposed to be at ground level, with two floors of data hall above.

Some areas of these plant rooms require high levels of ventilation whilst other areas need to be fully enclosed to allow a controlled environment. This requirement will provide some articulation and create the effect of fenestration to the facades. The data halls themselves will be enclosed by the cooling gantry on either side of the buildings. Additional cooling will be required for the electrical rooms and this will require chiller units at roof level.

The requirement for heat rejection from the IT spaces, through indirect air-cooling units is managed by a series of large 'chimneys', and these would articulate the elevations to break the long facades and add interest to the skyline of the building.

Areas of façade, where there is no requirement for louvres and air movement could be used to create green wall, or living wall planting, to contribute to both the bio-diversity and to the visual aspect of the woodland setting.

To formulate the indicative scheme that is the basis of the parameter plans that form a part of this application, a 3D model was used, based around the functional requirements of the data halls.



*Preliminary 3D model of an indicative DC proposal*

## 6. Design: Materials

### 6.1 Materials Palette

The form of construction proposed for the data centre buildings is lightweight steel frame, with reinforced concrete floor construction with the building clad in composite, insulated, steel panels with colour coated finish. The office areas will have full height glazing and will be protected from solar gain and glare by brise-soleil panels.



The following palette of materials are being considered for construction of the facades. These proposals, along with other considerations of the elevation treatment are indicative-only at this stage. The expectation is that the facade design will be subject to a reserve matters application.

The Materials being considered are:

- Engineering brickwork ground floor construction to indicate the base of the building, with upper levels in lightweight materials
- Colour coated high-scale louvres to provide ventilation to the electrical and mechanical rooms
- High reflective black glazing/cladding to circulation cores: to identify areas of vertical circulation within the building form. This type of cladding allows for areas of glazing to stairs and lift lobbies to be alternated with solid panels, making the function of the mass evident.
- Main cladding using composite insulated steel panels that would be colour coated. This cladding would act as a rainscreen giving an opportunity for additional decorative panels to be applied to the outer façade.
- Potential for an external steel frame to support the cooling gantries and identify the different function of external plant areas and the environmentally controlled main construction.
- Office areas would be fully glazed, with brise-soleil screening to provide protection from solar gain and glare, where required.
- Areas of external wall could support vertical landscaping in the form of 'living wall' planting cultivated on stainless steel tension wires.

## Black Glass Cladding



## Metal Feature Slides



## Brick Pillars



## Living Wall

*Proposed Material Palette (note that Façade treatment and design is part of Reserved Matters)*

## 7. Design: External Works/Landscaping

### 7.1 Vehicle Access and Site Security

Vehicular access will be from Thorney Mill Road, at a point between the existing access point and the east end of the site frontage. There is an opportunity to set the security gates back from the site frontage and provide some tree planting and landscaping along the frontage. There will be a security lodge adjacent to the gates, to control access to the site.

The general requirement for security to data centre sites is that prior notification is required for any vehicle requiring access to the site. Reason for visit and security credentials will need to be approved in advance of the visit, and a check on credentials will be made for the vehicle is allowed entry.

A secure perimeter will also be essential in the development of the site for data centre use. This would be accompanied by electronic surveillance using thermal imaging and infrared CCTV cameras linked to the 24 hour security lodge. All incoming vehicles and pedestrians will be held at the security lodge by electronic bi-parting vehicle gates and pedestrian turnstile to allow a security check of everyone entering the site.



Image to show examples of security fencing

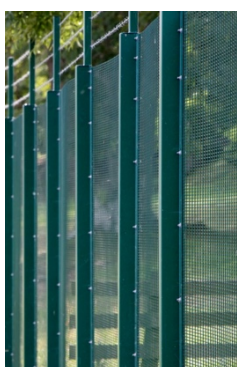


Image to show an example of bi-folding security gates



Photograph of the existing fencing and gate at the site entrance

### 7.2 Car Parking

The requirement for office accommodation within a data centre is very much dependent on the end user's specific requirements. There will be the need for administrative staff, security personnel, receptionists, cleaners etc, and there will be a need for staffing a control room to oversee the technical functions of the building complex.

There could also be a user requirement for general office accommodation related to the wider business of the management company. Parking requirements (including parking for wheelchair

users) will be determined by the end user and the number of parking spaces provided should be a part of a reserved matters application.

### 7.3 Cycle Storage

Cycle storage and associated shower and locker facilities will be provided to suit the (as yet unknown) requirements of the end user. It is envisaged that the proposed development would be designed to meet BREEAM standards, with the expectation of achieving the level of Excellent, as a minimum.

### 7.4 Pedestrian Access

It is not expected that many visitors to, or the staff of the campus will arrive as pedestrians, although it is possible that pedestrians could be delivered by vehicle outside of the security compound. A secure turnstile is proposed at the security lodge, together with a pass gate for visitors using wheelchairs.



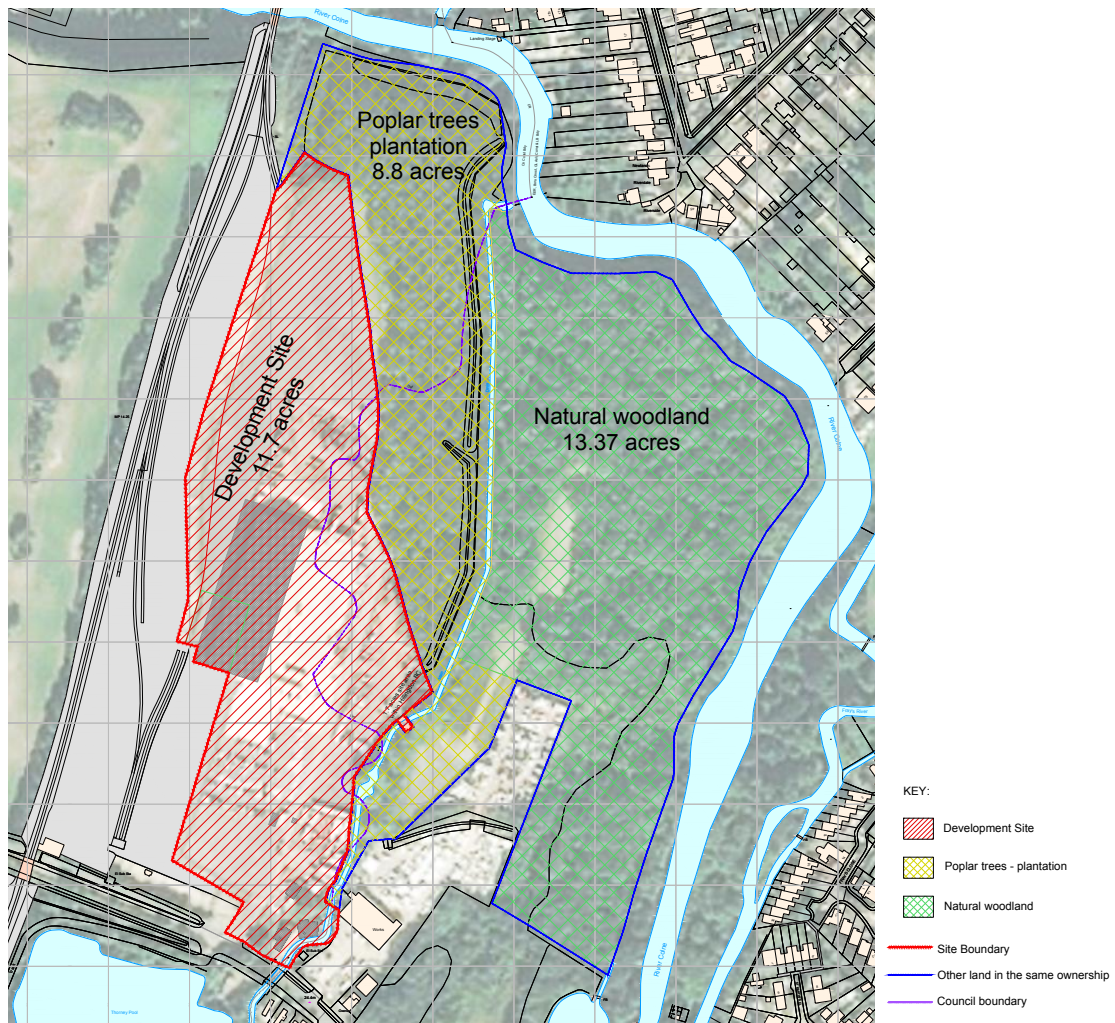
*Image to show example of security pedestrian turnstile with wheelchair access pass gate*

### 7.5 Landscaping

The application site is currently devoid of any soft landscape features, although immediately adjacent to the site is a plantation of poplar trees, which border onto the site perimeter. Beyond this is an area of natural woodland.

Adequate roadways will be required through the site to allow both for delivery of IT equipment during fit out of the data halls and for initial installation of mechanical and electrical equipment and the ongoing maintenance requirements. The indicative site layout plan in Section 5 shows the amount of road that will be necessary, and also shows areas of tree planting that will be possible to reinforce the existing planting on the adjacent site. In addition to tree planting, it is expected that landscaped areas will allow additional biodiversity measures provided by a variety of annual and perennial plants.

A final landscaping scheme will be submitted as part of the reserved matters application. The site plan below shows the development area of the site and the adjacent areas of woodland:



## 7.6 Natural Woodland Area

It is proposed that the natural woodland area to the east of the application site, beyond Bigley Ditch is made available to the general public. The draft HoTs for the Section 106 legal agreement will include the gifting of the woodland to the local authority for public use.

## 8. Design: 3D Model

### 8.1 Images of the Indicative Design Proposal:

From the development 3D computer model that was prepared to assess the scale and massing of the proposed data centre buildings it has been possible to produce illustrative CGIs of what could be developed to meet the requirements for a data centre campus on the application site.



*CGI showing indicative design viewed from southeast corner of site*



*CGI showing indicative design viewed from centre of site looking northwest*

## 9. Access Statement

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### 9.1 Introduction

The applicant wishes to re-develop the Link Park Heathrow site for use as a data centre campus. The development will provide two independent buildings with a maximum height of 25m having a minimum of three storeys of data halls and support electrical and mechanical infrastructure, plus a roof top gantry for chillers and other related equipment.

The data centre building type is essentially a warehouse for the storage and distribution of electrical data. The storage is within computer cabinets, mounted in racks across a data hall that is served by electrical input and cooling equipment. The distribution of the data is by fibre optic cables running from the computers to below ground distribution networks.

Apart from the data halls themselves, up to 50% of the building area will be occupied by the electrical and mechanical infrastructure rooms. The electrical rooms will contain a large number of large switchgear cabinets, together with arrays of batteries to provide uninterrupted electrical power to the computers. The mechanical rooms and external cooling gantries will contain air handling ducts and fans, chilled water pipes and room conditioning units.

There will also be extensive fire detection and protection equipment, including water sprinkler/mist systems and possibly gas protection systems.

This equipment will present health risks to unqualified and inexperienced visitors and will need constant maintenance by specialist engineers.

### 9.2 Statutory Requirements and Design Standards

The proposed new development is designed to comply with all current legislation, standards, design guides and codes of practice related to use by disabled persons, including the following:

The Equality Act 2010 (which replaces the repealed Disability Discrimination Act 1995) prohibits discrimination against people with protected characteristics, and in the context of this Access Statement will include people with disabilities (defined in section 6 of the Act).

Part M of the Building Regulations that sets out requirements to make provision for people with disabilities.

### 9.3 Design Approach

The end user/data centre provider that will take the proposed development through the final design stages and reserved matters application will be fully aware of the responsibilities placed on them and seek to deliver a building that takes account of the Equality Act and Building Regulations whilst having regard to the technical processes being carried out in the data centre building. They will be committed to a policy of equality, inclusion and accessibility.

The project design team for this outline application have sought to identify and design out where possible any physical features that may discriminate against employees or visitors suffering from any form of disability.

The data centre campus will be contained within a secure area, controlled by a 24 hour presence of security staff. Vehicular, pedestrian and cycle access for employees and visitors will be through the entrance gates off Thorney Mill Road, where a security vehicular gate and pedestrian turnstile are proposed. These are card reader controlled for employees, or from the security lodge that will be adjacent to the gates. Alongside the turnstile will be a pass gate that is compliant with the needs of wheelchair users. A level pedestrian route will be provided, with dropped kerbs at road crossings, linking to the main entrance to each of the data centre buildings. Each building will have a secure reception area, controlled from the security office at the point of entry.

Emergency escape from each building is designed to comply with the requirements of the Building Regulations and will be developed with guidance from BS 9999:2017. Escape stairs will be provided with refuge points at each floor level to allow disabled people to be safely escorted from the building in an emergency. There will be two fireman's lifts in each data centre building and all lifts will be suitable for access by wheelchair users.

Formal consultation will take place with the Fire Authority and Building Control Body during the detailed design stage of the project when a suitable management strategy will be developed to ensure the safe evacuation disabled persons.

## **9.4 Summary**

The final end user will have their policy statement for compliance with the various regulations and acts and this will show how the final building design will meet the requirements. This policy statement will make reference to inherent limitations in accessibility created by the particularly onerous processes carried out within the building.

Consultation with Local Authority planners, access officers and Building Control will follow as part of the reserved matters application process. Conditions and recommendations from these bodies will be discussed and implemented where necessary, to ensure an outcome that is will provide an inclusive design to meet the standard that is appropriate to this development.

## 10. Appendix

### 10.1 Parameter and Illustrative drawings for development of the Application Site

The following drawings are included in this outline planning application:

| Drawing No   | Title                                   | Size | Scale  | Rev |
|--------------|-----------------------------------------|------|--------|-----|
| 0485-A02-100 | Existing Site Plan                      | A1   | 1:1250 | P03 |
| 0485-A02-020 | Indicative Site Layout                  | A1   | 1:1250 | P03 |
| 0485-A03-111 | Parameter Plan 01 – Site Layout         | A1   | 1:1250 | P06 |
| 0485-A03-113 | Indicative Layout – GF Plan and Section | A1   | 1:200  | P01 |
| 0485-A03-114 | Indicative Layout – DH Floor Plan       | A1   | 1:200  | P01 |
| 0485-A03-120 | Site Plan – Adjoining Woodland          | A1   | 1:1250 | P03 |
| 0485-A02-125 | Site Plan – Railhead re-location        | A1   | 1:1250 |     |

| Prepared by | Checked by | Revision ref | Date     | Stage/Status   |
|-------------|------------|--------------|----------|----------------|
| AN          | NW         | P01          | 14/12/20 | Internal Issue |
| AN          | NW         | P02          | 17/12/20 | Draft Issue    |
| AN          | NW         | P03          | 21/12/20 | Final Issue    |