

Site and Setting

2.1 Introduction

- 2.1.1 This chapter provides a brief description of the Site and its surrounding areas, including key features, designations and sensitive receptor locations that may be affected by the Development. A full description of the baseline conditions relevant to the technical assessments is provided in each technical chapter (i.e. Chapters 7 to 16 and ES Volume II).

2.2 Site Context

Location and Extent

- 2.2.1 The Site is located in Oxfordshire, wholly within the administrative boundary of Cherwell District Council (CDC). It is situated approximately 6.7km north west of Oxford city centre, approximately 625m west of Kidlington village centre and close to the villages of Yarnton and Begbroke. The Site is situated at Ordnance Survey (OS) National Grid Reference (NGR) SP 47895 13528. A location plan of the Site is shown on Figure 1.1 and the indicative Site boundary is shown on Figure 2.1. The planning application boundary drawing is provided in Appendix 5.1.

Figure 2.1: Site Boundary Plan



Site Description

- 2.2.2 The Site covers an area of approximately 170 hectares (ha). The majority of the Site is currently in agricultural use for arable farming and includes a small number of farm buildings (Parker's Farm) and access roads. A section of the agricultural land in the south west of the Site is currently used as a poultry farm. The agricultural land is divided into a number of interlinked fields, with hedgerow and tree-lined borders and a system of ponds and ditches that drain into nearby watercourses. Begbroke Science Park, owned by the University of Oxford, is located within the central northern part of the Site. The Cherwell Valley railway line passes through the Site on a north-south alignment. The railway crosses Sandy Lane via a level crossing.
- 2.2.3 Sandy Lane crosses the Site on an approximate west-east alignment, joining the A44 (Woodstock Road) to the west of the Site and Yarnton Road to the east of the Site. To the south of Sandy Lane are two residential properties, 86 and 88 Sandy Lane, which lie outwith the Site boundary. Two additional residential properties – Crossing Cottage and The Caravan – are located to the east and west of the Sandy Lane crossing respectively, also outwith the Site boundary.
- 2.2.4 A historical landfill site, known as 'Sandy Lane East', is located south of Sandy Lane in the centre of the Site, approximately 250m south of Begbroke Science Park. The historical landfill site is approximately 5.2ha in area. The landfill historically received inert and industrial waste. Site investigation work indicates that the landfill is predominantly comprised of brown gravelly sand (predominantly ash) and other man-made materials.
- 2.2.5 A circa 1 ha area of allotments ('Yarnton Allotments') is located within the Site, adjacent to the south of the Site access junction off the A44 with Begbroke Hill.
- 2.2.6 The Site is bound by the following features:
- To the north and north east by Rowel Brook, which discharges into the Oxford Canal to the east of the Site, beyond which are residential dwellings off Fernhill Road within Begbroke Village;
 - To the east by the Oxford Canal, beyond which is the village of Kidlington;
 - To the south by Flit Solar Farm and agricultural land; and
 - To the west by the A44, residential and commercial properties, including Yarnton Garden Centre, Yarnton village and allotments.

Begbroke Science Park

- 2.2.7 Begbroke Science Park ('BSP') is owned and managed by the University of Oxford. It comprises of six one to two storey buildings totalling 15,165 square metres (sqm) floorspace that include laboratories, engineering facilities and administrative buildings. It also includes the Grade II listed Begbroke Hill Farmhouse. Supporting the research facilities are 369 surface car parking spaces, service yards and bicycle storage racks.
- 2.2.8 BSP is subject to planning permissions for new development, with further details set out in the 'Future Development' section of this chapter.

2.2.9 An aerial image of BSP (taken in 2022) is provided as Figure 2.2.

Figure 2.2: Aerial Photo of Begbroke Science Park (looking north east)

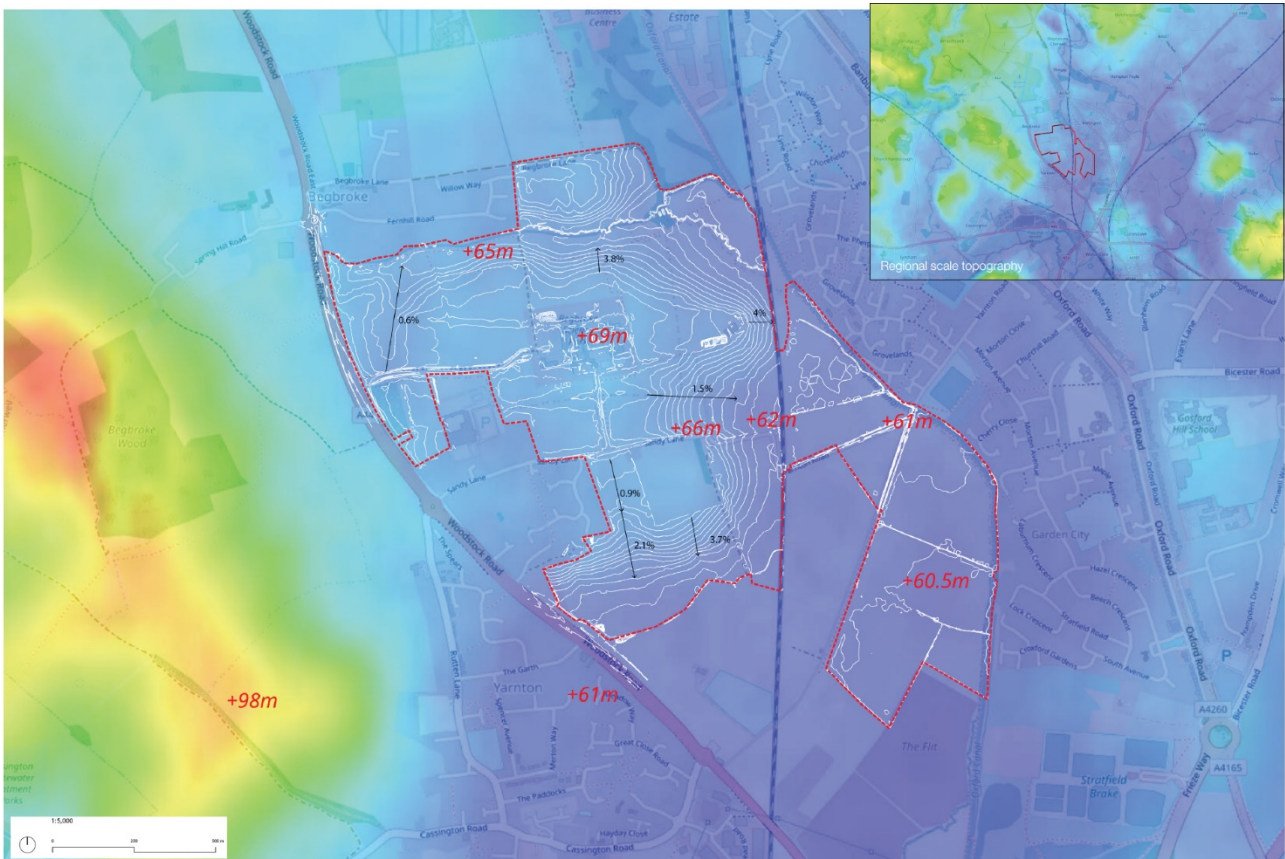


Source: Provided by Applicant

Topography

2.2.10 The topography of the Site slopes moderately from north west to south east, towards the Oxford Canal. The highest elevation at 69m Above Ordnance Datum (AOD) is within the BSP. The surrounding land falls away in all directions towards low points at Rowel Brook, Hallam Land and the Network Rail boundary, dipping to 60.5m in the south east of the Site towards the Oxford Canal. Sandy Lane forms an east-west topographical ridge which intercepts surface water flowing north-south. This is illustrated on Figure 2.3.

Figure 2.3: Site Topography



2.3 Surrounding Area

Land Uses

- 2.3.1 Land to the west of the Site is dominated by agricultural land, with sparsely located residential and commercial development. To the north-west of the Site is the village of Begbroke, which is adjacent to the Site boundary at its closest point. Kidlington is located to the east of the Site and comprises residential, commercial and industrial development. Kidlington village centre is located approximately 625m east of the Site.
- 2.3.2 The village of Yarnton is located to the south-east of the Site and comprises residential and commercial development. Yarnton village centre is located approximately 740m south-west of the Site.
- 2.3.3 To the north of the Site, south of Langford Lane, are three business parks which include a range of commercial and industrial uses: Station Field Industrial Estate (approximately 300m north of the Site), Chancerygate Business Centre (approximately 740m north of the Site) and Oxford Motor Park (approximately 680m north of the Site).
- 2.3.4 Campsfield House, a former immigration detention centre, is located approximately 0.7km north of the Site. Currently, options are being explored to re-open Campsfield House as an Immigration Removal Centre in late 2023.

- 2.3.5 Oxford Airport is located to the north of the business parks, approximately 750m north of the northern Site boundary. Oxford Airport provides private and business aviation services and is home to a number of flight schools.

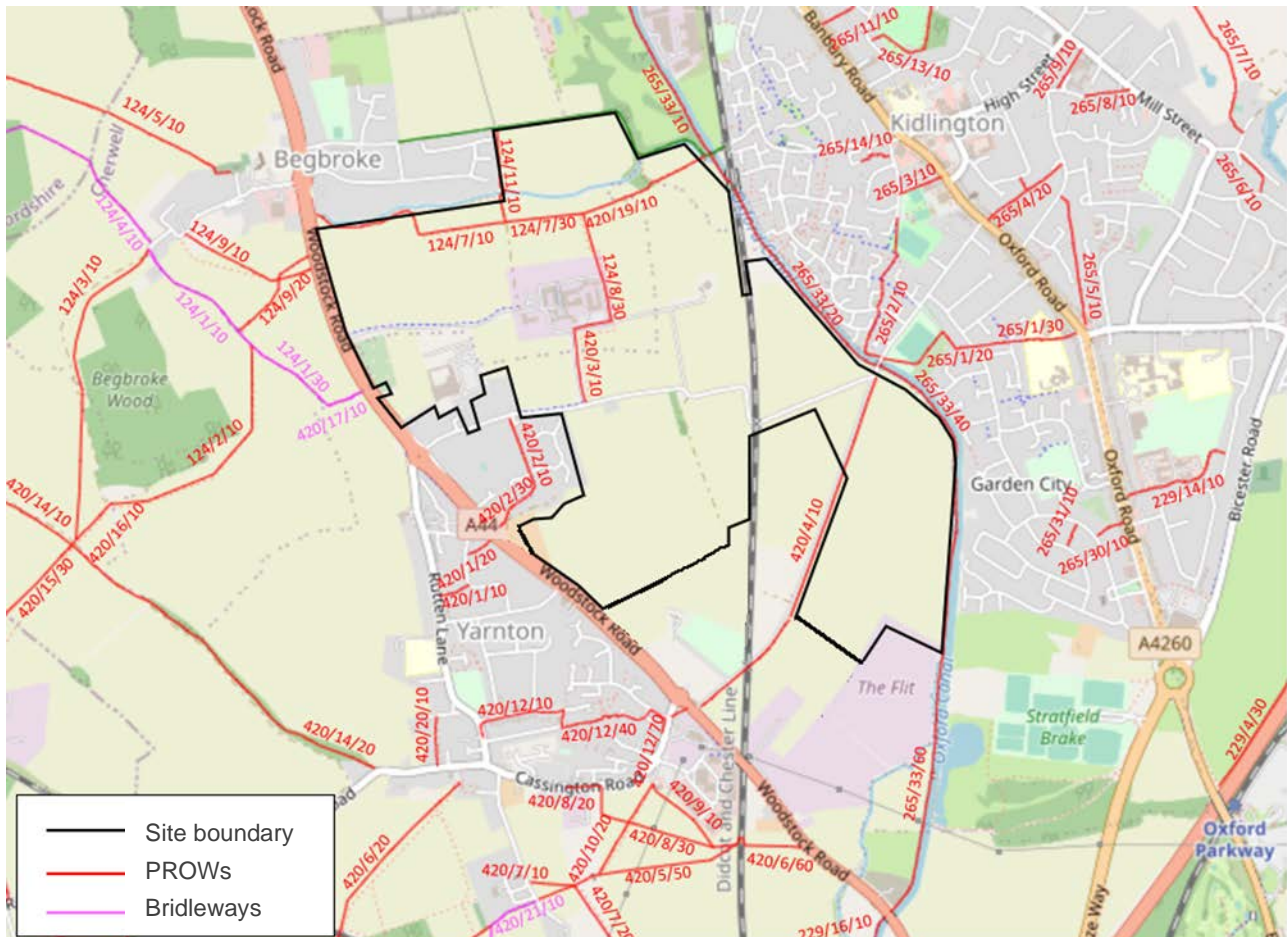
Transport and Access

- 2.3.6 The strategic road network in the area includes the A44 to the west, A34 (to the south) and the A4260. The Oxford Canal also bounds the Site to the east, with access from the towpath.
- 2.3.7 Vehicular and pedestrian access to the Site is currently gained via Begbroke Hill, Sandy Lane and Kidlington Lane. Begbroke Hill provides access from the A44 in the west to the Begbroke Science Park. Sandy Lane crosses the Site in a west-east alignment. Kidlington Lane crosses the south of the Site in a north east–south west alignment and connects with Green Lane which connects to the A44, approximately 500m to the south of the Site.
- 2.3.8 The closest bus stop to the Site is located on Sandy Lane approximately 180m west and approximately a two minute walk west from
- 2.3.9 the Site boundary over the canal bridge. The bus stop is served by the number 9 bus which runs between Middle Barton and Kidlington. Additional bus stops are located on the A44 northbound and southbound, approximately 420m and 365m west of the Site boundary respectively, and approximately a 10 minute walk from the Site boundary. The bus stops are served by the by NS3 gold and S3 gold buses, which run between Oxford and Chipping Norton.
- 2.3.10 The railway constitutes a physical barrier through the Site. Two crossings currently make vehicular access from Kidlington possible, one to the north and one at the centre of the Site along Sandy Lane.
- 2.3.11 Oxford Parkway Railway Station is located approximately 1km south east of the Site boundary (approximately 30-minute walking distance on public routes) and has dedicated cycle parking facilities. Oxford Parkway Railway Station is served by Chiltern Railways services between London Marylebone and Oxford. The basic weekday daytime frequency of services to and from Oxford, High Wycombe, Beaconsfield, and London is every 30-minutes, with a similar frequency operating in the evenings and on Sundays. During the peak periods there are four peak period (07:00-09:00) trains to Oxford in the morning and 2 trains to London leaving after 07:00 and getting into London before or around 09:00. The typical journey time from Oxford Parkway to Oxford is c. 8 minutes, with the typical journey time to London Marylebone being c. 75 minutes.
- 2.3.12 There are also ‘Park and Ride’ facilities nearby to the Site. The Peartree Park and Ride facility is located at the Peartree Interchange, the junction between the A44 and A34 to the south of the Site. It has 1,035 parking spaces and is served by route 300, which routes between Peartree and Redbridge Park and Ride facilities via Oxford city centre 5 times per hour (i.e. 12 minute frequency).
- 2.3.13 Oxford Parkway ‘Park and Ride’ (formerly referred to as Water Eaton) is located to the south east of the Site and has 758 parking spaces. The Park and Ride facility is served by bus routes 2 and 2a and 700 services, providing frequent connections to Oxford city centre

and John Radcliffe hospital, respectively. Routes 2 and 2a have a 15 minute frequency and route 700 has a 30 minute frequency.

2.3.14 A number of Public Rights of Way (PROw) cross the Site as shown on Figure 2.4.

Figure 2.4: Existing Public Rights of Way Network

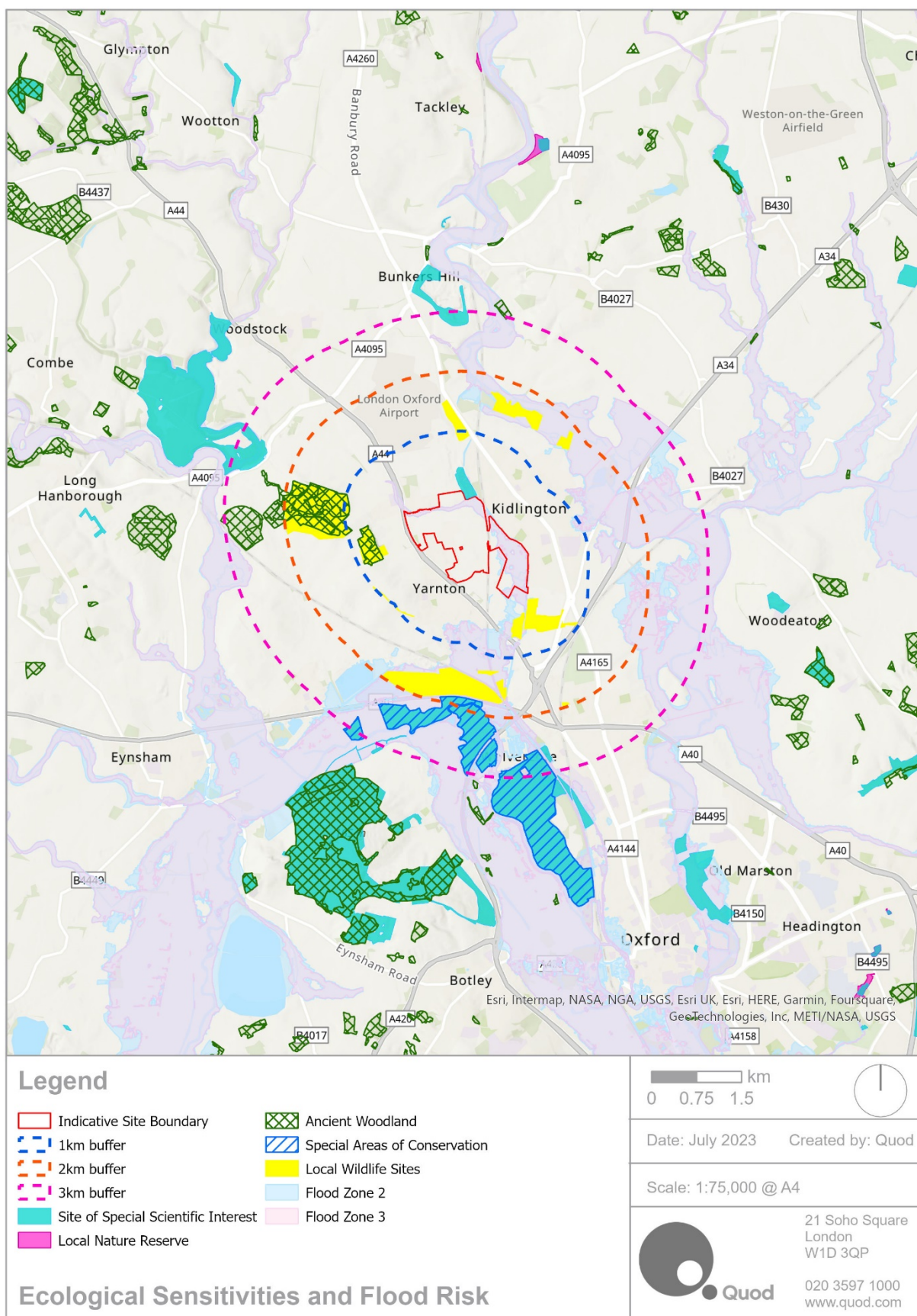


Site and Surrounding Sensitivities

2.3.15 Figure 2.5 and 2.6 identify the key environmental sensitivities within and in close proximity to the Site. In addition, residential dwellings on the edges of Yarnton and Begbroke villages, Kidlington, and users of the Oxford Canal and local road network where they are in close proximity to the Site boundary would also be considered sensitive receptors to the construction and operation of the Proposed Development.

2.3.16 The Site is not subject to any statutory designations for nature conservation, geodiversity or landscape. The Grade II listed Begbroke Hill Farmhouse within Begbroke Science Park is the only heritage designation within the Site.

Figure 0.5: Nature Conservation Designations and Flood Risk



Cultural Heritage

- 2.3.17 There are no Scheduled Monuments, Registered Parks and Gardens or Registered Battlefields within the Site or within 500m of the Site boundary. Yarnton Manor Grade II listed Registered Park and Garden is located 900m south of the Site. The Blenheim Palace World Heritage Site and Grade I Registered Park and Garden is located approximately 3km north west of the Site boundary. The edge of the Cotswolds Area of Outstanding Natural Beauty (AONB) is located approximately 3.5km north west of the Site.
- 2.3.18 Grade II Yarnton Bridge and Roundham Lock, associated with Oxford Canal, are located adjacent to the eastern Site boundary with Grade II Tudor Cottage adjacent to the western Site boundary on the A44. There are over 100 listed buildings within 2km of the Site, notably the Grade I listed Church of St Bartholomew and Church of St Mary, approx. 950m south and 1.6km north east of the Site respectively. The Site is not located within a Conservation Area (CA), but there are 13 CAs within 3km of the Site, with the closest being Oxford Canal CA, located on the eastern Site boundary and Begbroke Conservation Area approximately 140m north west of the northern corner of the Site.
- 2.3.19 A small number of locally listed buildings have been identified within and in close proximity to the Site. These are shown on Figure 2.6 above. Further information can be found in Chapter 8: Cultural Heritage.

Biodiversity

- 2.3.20 There are no statutory designations for nature conservation within the Site. Rushy Meadows Site of Special Scientific Interest (SSSI) is adjacent to the north east of the Site and there are a number of other SSSIs within 10km of the Site. Oxford Meadows Special Area of Conservation (SAC) and Pixey and Yarnton Meads SSSI are located approximately 1.8km south of the Site, with Wytham Woods SSSI circa 3.5km south west (at its closest point). There are eleven Local Wildlife Sites (LWS) within 2km of the Site. There are no Local Nature Reserves (LNR) within 5km of the Site. There is one non-statutory designated site within the Site boundary, the Lower Cherwell Valley Conservation Target Area (CTA), which extends into the north-eastern corner of the Site. In addition, there are 17 other non-statutory designated sites within a 2km radius of the Site.
- 2.3.21 There is no ancient woodland within the Site. The ancient woodlands of Begbroke Wood, Blandon Heath and Worton Heath are located approximately 660m west, 900m west and 1.1km west of the Site respectively. No Tree Preservation Orders are present on the Site.

Air Quality

- 2.3.22 The Site is not located within an Air Quality Management Area (AQMA). The closest AQMAs to the Site are the CDC AQMA No.3 (Kidlington) and City of Oxford AQMA approximately 1.5km east and 1.5km south of the Site respectively. Both AQMAs were declared due to exceedances in annual mean levels of nitrogen dioxide.

Ground Conditions and Contamination

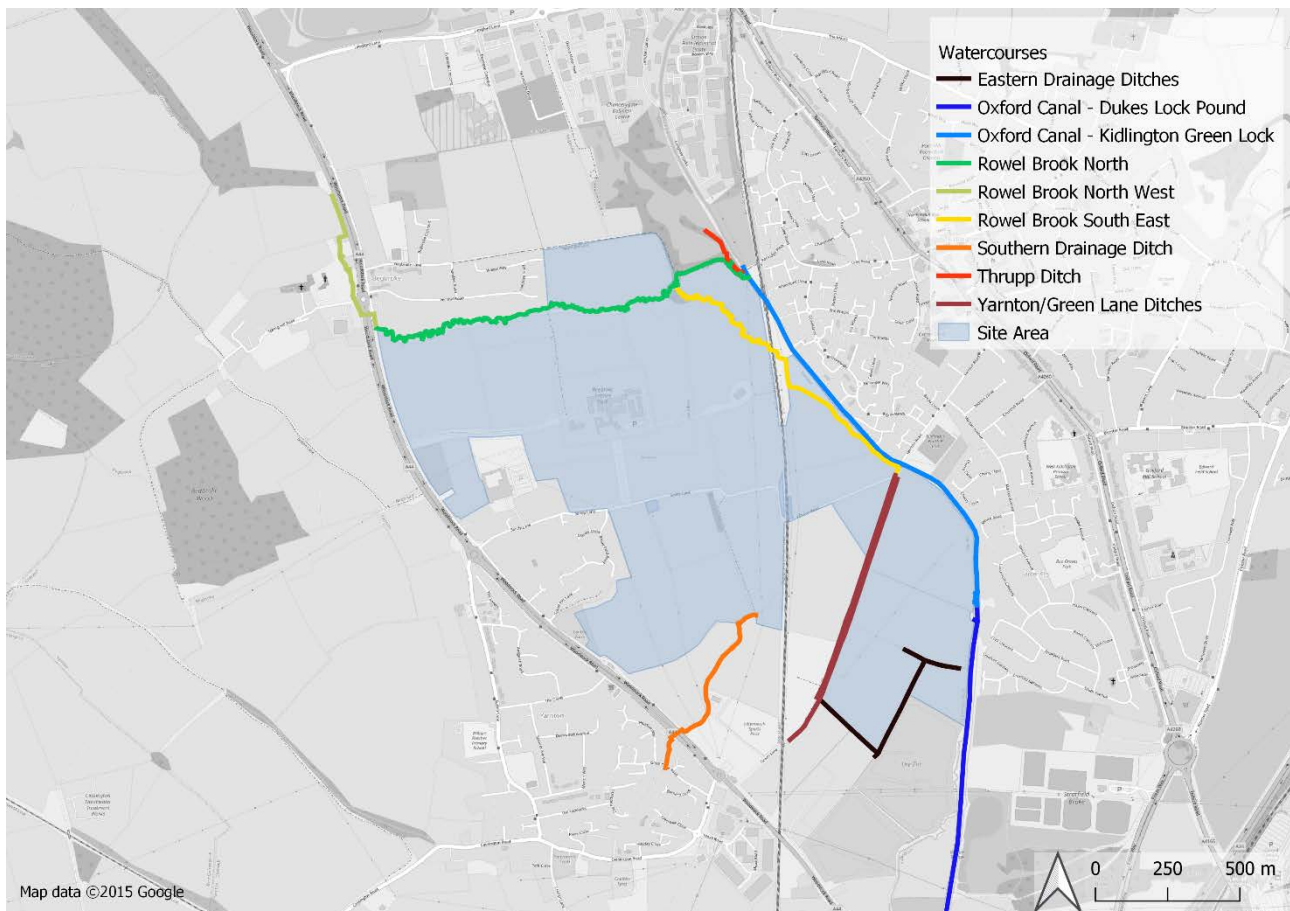
- 2.3.23 The solid geology underlying the Site comprises a mix of clay, sand, limestone and marble strata. This is overlain by alluvium and river terrace deposits, with topsoil and made ground at the surface.

2.3.24 A historical landfill site – Sandy Lane East – is located in the centre of the Site. This was backfilled the former Sandy Lane Gravel Pit that accepted inert and industrial waste.

Water Resources and Flood Risk

2.3.25 Rowel Brook forms the majority of the northern boundary of the Site. This flows west to east towards the Oxford Canal which forms part of the eastern Site boundary. A small watercourse (referred to as 'Thrupp Ditch'), runs through Rushy Meadows SSSI to the north of the Site converging with Rowel Brook on the central-northern edge of the Site and a small stream/ditch is located in the south of the Site. An illustration of the existing surface water drainage avenues on and in vicinity of the Site is provided on Figure 2.7.

Figure 2.7: Existing Surface Water Drainage System



2.3.26 The majority of the western part of the Site is within Flood Zone 1 and therefore classified as being at low risk of fluvial flooding. The northern edge of the Site adjacent to Rowel Brook, and the majority of the Site located east of the Cherwell Valley railway line is within Flood Zone 2 or 3, indicating a medium or high risk of flooding.

2.3.27 The majority of the Site is of a very low risk of surface water flooding (less than 0.1% chance of annual flooding). Areas around Rowel Brook and drainage channels within the east and south east of the Site are of a medium (between 1 – 3.3% chance) to high risk (greater than 3.3% chance) of surface water flooding.

2.3.28 The western half of the Site has a medium susceptibility of groundwater flooding, with the eastern half having a high susceptibility. A small area north of Rowel Brook has low vulnerability to groundwater flooding. Further information can be found in Chapter 16: Water Resources and Flood Risk.

Future Development at the Site

2.3.29 Begbroke Science Park, located in the centre of the Site benefits from the following extant planning permissions:

- Expansion of Science Park (ref: 18/00803/OUT) – In March 2018, outline planning permission was granted for the construction of up to 12,500 square meters (sqm) of business and ancillary uses. A reserved matters application (21/03150/REM) was approved in January 2022. Construction of this development has begun and is assumed for the purposes of the EIA process to be complete and operational by 2025. This planning permission is known as Begbroke Science Park Phase 1 and two new buildings are being developed at Begbroke Science Park, providing circa (c.) 12,500 sqm of space for commercial research companies to grow and further facilities for OU research. One building (c. 5,000 sqm) will provide academic facilities, and the second building (c. 7,500 sqm) will be for commercial space.
- Creation of Car Park (ref: 21/03195/F) – In February 2022, full planning permission was granted for the formation of a surface car park and service building (including substation, sprinkler tanks and EV charging infrastructure). It is expected that construction of this development will commence in 2023 and that it would be complete by 2025.

2.3.30 Network Rail are developing detailed proposals to close two level crossings and provide two new pedestrian / cycle bridges across the railway. For the Sandy Lane crossing, this could become a pedestrian, cycle and public transport bridge, subject to the final design. These proposals will be subject to separate a separate Transport and Works Act Order to be submitted in late 2023 by Network Rail.

2.3.31 Development proposals are also coming forward for other allocated sites to the east and south of the Site. Hallam Land Management Ltd. ('HLM') are preparing proposals for housing development on land immediately south of the Site which forms part of the PR8 site allocation in the Local Plan. To date, HLM have submitted an EIA Scoping Opinion request (ref: 21/00758/SCOP) in March 2021 which sets out that the proposals will comprise up to 300 new homes. A Scoping Opinion was issued by CDC in July 2021. A planning application has not yet been submitted.

2.3.32 In March 2022, Barwood Development Securities Limited and the Trustees of The Philip King Homes Trust submitted an outline planning application (ref: 22/00747/OUT) for the allocated PR7a site to the south east of the Site, across the canal. The outline planning application is seeking approval for up to 370 homes, public open space (including play areas and woodland planting), sports pitches and pavilion, drainage and engineering works, with all matters reserved (appearance, landscaping, layout and scale) except for vehicular and emergency accesses to Bicester Road. In May 2022, Manor Oak Homes and partners submitted an outline planning application for up to 118 homes with access from Oxford

Road on the allocated PR7b site (ref: 22/01611/OUT). These applications are currently under consideration by CDC.

- 2.3.33 In May 2023, Bellway Homes Limited and Christ Church, Oxford submitted an outline application (ref: 23/01233/OUT) for the allocated PR6a site approx. 1.4km south east of the Site. This proposes development of up to 800 new homes, a 2 Form-Entry primary school, non-residential uses, a local centre, amenity space, parking and access. The application is currently under consultation.
- 2.3.34 In June 2023, CDC recommended to grant planning approval for redevelopment of land at Oxford Airport (ref: 23/00517/F and 23/00915/F) to create new buildings for employment and ancillary uses.
- 2.3.35 It is envisaged that the construction works associated with the Proposed Development will overlap with some of these development projects and cumulative effects may occur. Further assessment is provided in the technical ES chapters (7 -16 and Volume II) where relevant.