2 Site and Local Context

2.1 Introduction

2.1.1 This chapter provides a description of the Site and its setting. Further details relevant to the proposed scope of the technical assessments are provided in Chapters 7 – 17.

2.2 Site Description

2.2.1 The Site is located to the north of Arborfield, southeast of Shinfield. The Site is within short distances to other main centres of employment in the locality, such as Reading International Business Park, approximately 4.5km northwest, and Green Park Business Park, approximately 5.8km northwest.

2.2.2 The Site is part of the Wider LVGV SDL, shown in Figure 1.1, which equates to approximately 732.57 ha. The location and extent of the Site is identified by the red line shown in Figure 1.2 Site Location Plan LP.01 Rev. A. In total, the Site covers an area of approximately 23.35 ha.

2.2.3 The Site is comprised of farmland, with an electricity pylon and overhead cables to the western side of the Site running north to south.

2.2.4 The agricultural land quality of the Site varies between grade 3a (55% of the Site) and 3b (45% of the Site). Soil Resources are Scoped out of the ES, however, the full Agricultural Land Classification and Soil Resources Report, produced by Reading Agricultural Consultants, is included at Appendix 2.1.

2.2.5 The Site topography falls gently from 59m AOD in the southwest of the Site to 47m AOD in the east. The Site is bounded mainly by hedgerows and there are some field hedges and a few trees scattered in and along the boundaries of the Site. The Barkham Brook runs along the eastern boundary of the Site from southeast to northwest and the River Loddon is around 1km northwest of the Site. There are linear areas of surface water flooding on the Site.

2.2.6 The Site is located to the north of Mole Road and Church Lane and south of the Wider SDL, directly south of the University of Reading parcel. The HFLL land and Sindlesham, which is mainly of a residential nature with some industrial uses, are situated approximately 1.3km northeast of the Site.

2.2.7 To the south of the Site are the existing villages of Arborfield and Arborfield Cross, approximately 300m south of the Site. Further to the south is Arborfield Garrison; a strategic residential development of circa 3,500 homes. The delivery of Arborfield Garrison is well advanced with the building phase commencing in 2016. To the northwest of the Site is Shinfield, a village that has grown significantly in recent years as part of the 'South of the M4 Strategic Development Location', which was allocated in the previous Wokingham Borough Adopted Core Strategy Development Plan Document (January 2010).

2.2.8 The M4 runs around 1.4km to the north of the Site. The Thames Valley Science Park is located approximately 2.0km to the northwest of the Site.

2.2.9 Beyond the M4 is the established residential area of Earley. Reading town centre and Reading railway station are located approximately 7.0km further north west. Wokingham town centre is located approximately 5.0km east of the Site. Train stations are also located at Earley, Winnersh Triangle and Winnersh. The site is within short distances to other main centres of

employment in the locality, such as Reading International Business Park and Green Park Business Park.

2.2.10 Approximately 700m east of the Site is the Bearwood Lakes Golf Club beyond which is the residential area of Woosehill.

Site Access and Public Rights of Way

2.2.11 The Site is well located in terms of existing highway infrastructure and benefits from good connections to the local and strategic highway networks, notably the M4 (Junction 11), approximately 4.3km to the northwest of the Site.

2.2.12 The local area has a high level of pedestrian and cycle connectivity, due in part to the significant investment in new infrastructure that has been implemented over recent years in conjunction with the Thames Valley Science Park and south of the M4 SDL developments.

2.2.13 The Site has a single access point consisting of the farm track access from Church Lane to the southeast.

2.2.14 Outside of but to the northwest, the Site benefits from the South of M4 SDL bus service which already routes into the Thames Valley Science Park, providing a frequent service to and from key destinations within Reading such as the railway station, town centre, the Royal Berkshire Hospital and the University of Reading's main campus at Whiteknights. Additionally, route 145 runs once a week on Tuesdays travelling from Winnersh to Three Mile Cross. Other bus routes include Routes 3 (Wokingham – Finchampstead – Reading) and 3B (Bracknell – Finchampstead – Reading) that run more frequently and are a short walk from the Site.

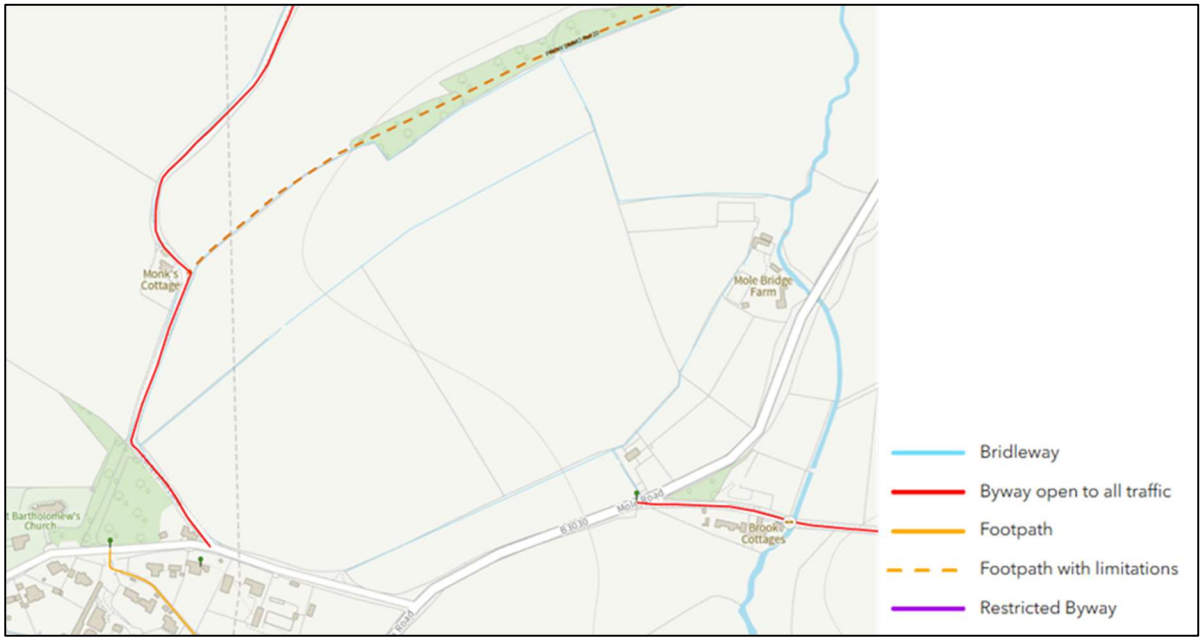
2.2.15 Other nearby bus links are accessible from Shinfield to the northwest, Sindlesham to the northeast, Arborfield and Arborfield Cross to the south and Earley to the north.

2.2.16 The nearest railway station is at Winnersh, approximately 3.1km to the northeast, which provides regular and frequent services operating between Reading and London Waterloo. Reading station, which forms an important hub on the national rail network, is circa 7.0km to the north while Green Park station is approximately 6.7km to the west. Wokingham Train Station is 4.2km east.

2.2.17 The area contains a number of nearby Public Rights of Way (PRoWs) (see Figure 2.1 below). The only route crossing the Site is the proposed bridleway *WBC DMMO Application 20* to the north of the Site. Additionally, the Site has a number of routes along its boundaries:

- ARBO Byway 3 – to the west of the Site
- ARBO Byway 4 – to the northeast of the Site
- ARBO Byway 8 – to the south of the Site
- PRoW proposed route – application for PRoW to the south of the Site

Figure 2.1 Existing Public Rights of Way (Screenshot of interactive map from Wokingham Borough Council)



Ground Conditions

2.2.18 A review of historical maps indicates that since 1872 the land has predominantly been within agricultural use with a number of drains/ ditches and gravel pits located across the Site. From 1971 the M4 motorway and subsequently the B3270 have been constructed to the north of the Site.

2.2.19 The superficial deposits are designated as Secondary A Aquifer (River Terrace Deposits and Alluvium) or Secondary B aquifer (Brickearth). The bedrock is designated an Unproductive Aquifer.

2.2.20 The DEFRA Magic Map online viewer indicates that the site lies outside any source protection zone (SPZ). The Site lies within a Secondary A aquifer.

Archaeology and Built Heritage

Archaeology

2.2.21 There are no Scheduled Monuments located within in the site boundary. The Scheduled Monument of St Bartholomew's Church is located approximately 0.9 km west of the Site. The monument comprises the ruins of a 13th-century church. A Grade II listed building, also known as St Bartholomew's Church (19th century) is also located approximately 0.1 km to the southwest of the Site. The southwestern corner of the Site and the eastern half of the Site are located within an area of high archaeological potential (number 43) as defined by the adopted WBC Planning Policy Proposals Map.

Built Heritage

2.2.22 There are no designated heritage assets within the Site boundary.

2.2.23 Within a 1km search radius of the Site there are around five Listed Buildings, all of which are Grade II Listed. The Reading Room built heritage asset is located immediately south of the Site and Monk's Cottage is located immediately north of the Site.

2.2.24 Bearwood Park, a Grade II* registered park and garden, is approximately 500m northeast of the Site.

2.2.25 Further details on built heritage assets and their assessment are provided within Chapter 9 – Built Heritage.

Flood Risk and Drainage

2.2.26 With reference to the Environment Agency's online Flood Map for Planning, the Site is in Flood Zone 1, although there is an area of Flood Zone 2 and 3 outside of the Site to the east, immediately adjacent to Barkham Brook. There are also linear pockets of surface water flooding to the south, north and east of the Site shown as having a high risk of surface water flooding.

Figure 2.2 Environment Agency Flood Risk Map (See Figure 9 within Appendix 13.1 Flood Risk Assessment)

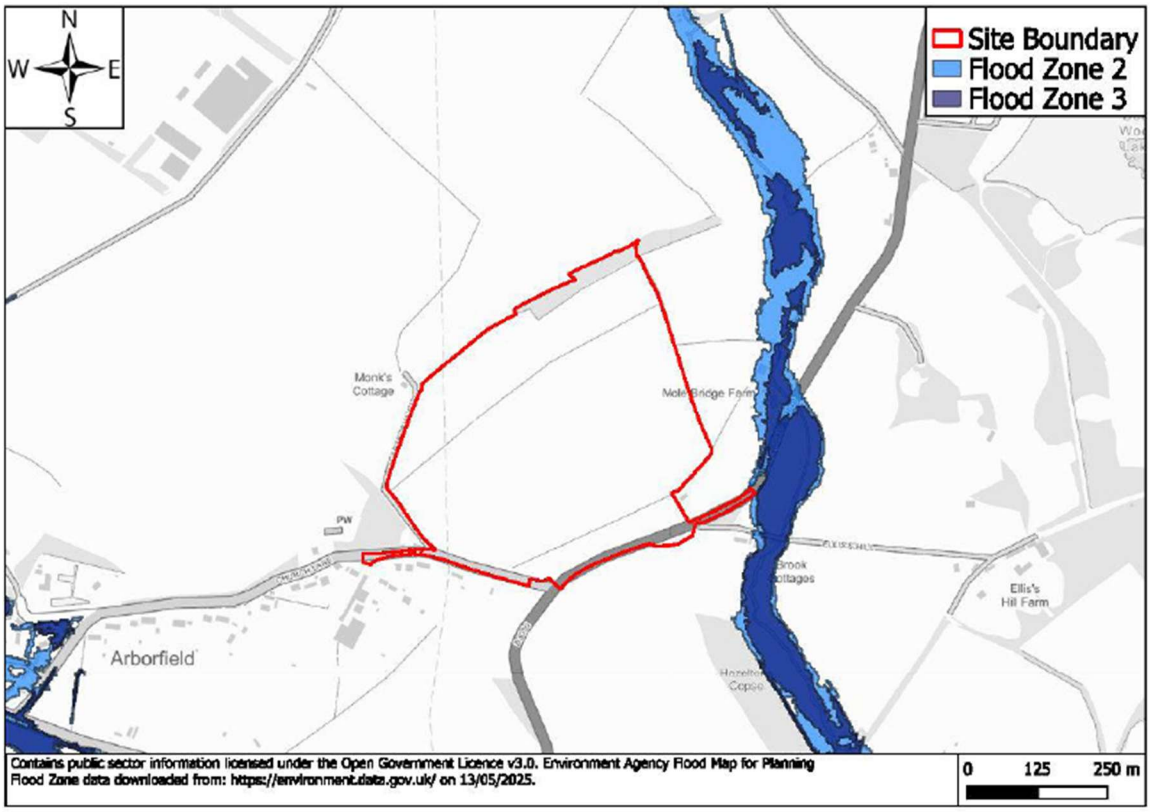
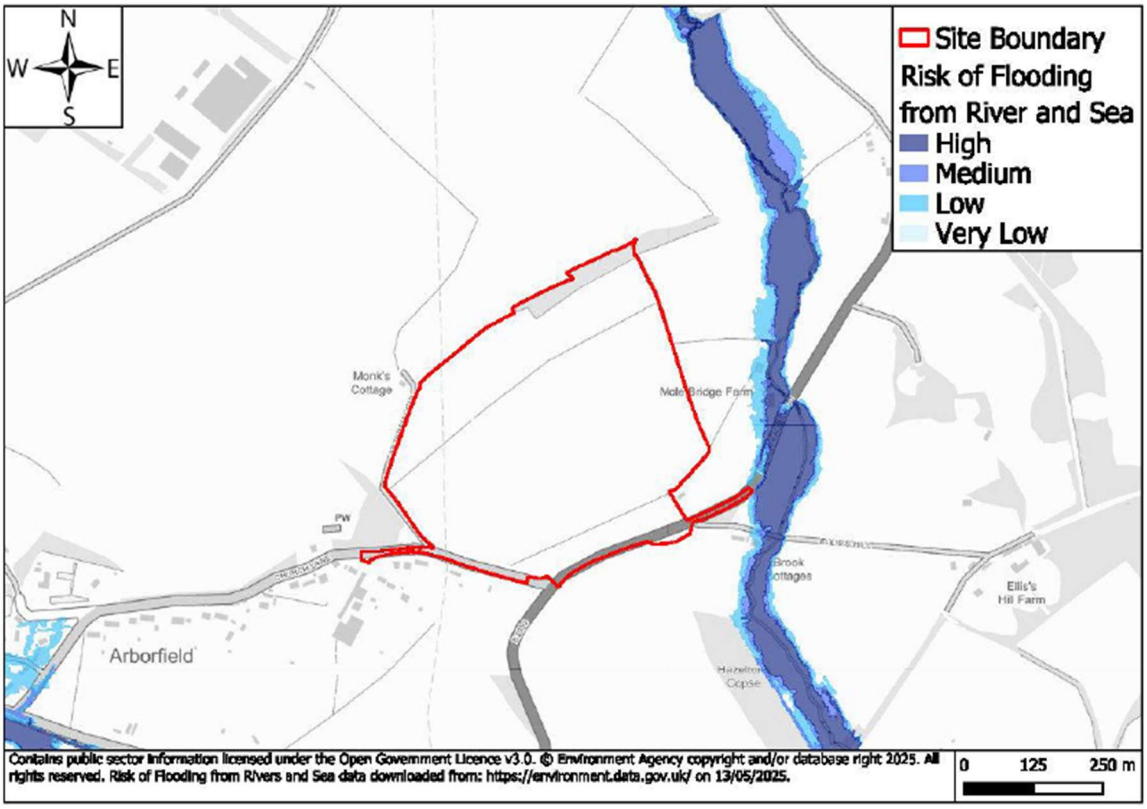


Figure 2.3 Environment Agency Surface Water Flood Risk Map (See Figure 10 within Appendix 13.1 Flood Risk Assessment)



2.2.27 Further details on hydrology, flood risk and drainage and their assessment are provided within Chapter 13 – Hydrology (including Flood Risk and Drainage).

Ecology and Nature Conservation

2.2.28 The closest statutory designated sites of national importance are four Sites of Special Scientific Interest (SSSIs) all within approximately 5km of the Site.

- Lodge Wood and Sandford Mill SSSI, located approximately 5km north east – Designated for large populations of the Loddon Lily.
- Longmoor Bog SSSI, located approximately 2.5km south east – Designated for its main features being a well-developed carr of alder Alnus glutinosa, grey willow Salix cinerea, downy birch Betula pubescens and alder buckthorn Frangula alnus and an area of wet heathland dominated by purple moor-grass Molinia caerulea and cross-leaved heath Erica tetralix.
- Bramshill SSSI, located approximately 5.91km south – Designated for a series of shallow acid ponds and associated mire, which support a rich assemblage of dragonfly and damselfly, and rotationally felled conifer plantation, which provides habitat for internationally important populations of nightjar, woodlark and Dartford warbler.
- Stanford End Mill and River Loddon SSSI, located approximately 5.02km south west – Designated for a series of traditionally-managed seasonally waterlogged hay meadows, and a 4 km stretch of the River Loddon, a tributary of the River Thames. The Site is of interest particularly for nationally important populations of two rare plants: the fritillary Fritillary meleagris, a native bulb of unimproved damp meadows now mainly confined to

scattered localities in southern Britain, and the Loddon pondweed Potamogeton nodosus, an aquatic species for which this length of the River Loddon is the national stronghold.

2.2.29 Twelve Local Wildlife Sites (LWS) are located within a 2km radius of the Site. No sites are located within or immediately adjacent to the Site boundary.

2.2.30 The Site is located approximately 4.4km north of the designated Thames Basin Heaths Special Protection Area (SPA). The Thames Basin Heaths is designated because it supports populations of Dartford Warbler Sylvia undata, Nightjar Camprimulgus europaeus and Woodlark Lullula arborea.

2.2.31 Further details on ecological sites and habitats are provided within Chapter 11 – Ecology.

Air Quality

2.2.32 Wokingham Borough Council (WBC) has designated 60m on both sides of the M4, throughout the Borough, as an Air Quality Management Area (AQMA) due to high levels of nitrogen dioxide (NO_2) pollution from road traffic. The AQMA was declared on 28 September 2001. The site is around 1.2km south of this designated AQMA.

2.2.33 Further details on Air Quality and its assessment are provided within Chapter 7 – Air Quality.

Noise

2.2.34 There are a number of existing noise sources within the vicinity of the Site. With main sources of noise from road traffic from the M4 motorway and surrounding local road network including the A327 and Mole Road. The M4 motorway, is a noise generating area to the north of the Site with very high existing road traffic noise levels however, due to the Site's distance from the M4, these are likely to be significantly reduced.

2.2.35 Further details on Noise and its assessment are provided within Chapter 16 – Noise and Vibration.

Utilities

2.2.36 The Site contains an overhead powerline, electricity pylon and gas Main. This includes high voltage overhead power. 132kV cables run north to south on the western side of the Site. 33kV cables are located on the western side of the Site, outside the area of the proposed development.

2.2.37 A medium pressure gas main is located in Mole Road on the southern boundary of the Site, turns north west and crosses the Site.

2.2.38 Full details of the existing utilities on and around the Site are provided within Appendix 3.3 – Utilities Assessment.

2.3 Summary of Sensitive Receptors

2.3.1 As described in the following technical scoping chapters, a number of sensitive receptors have been identified that have the potential to be significantly affected either directly or indirectly by the Proposed Development. These receptors will be considered in the design and the assessment of the scheme and are outlined below.

- occupiers of existing dwellings and commercial premises in proximity to the Site;
- the local population in respect of local services, schools, employment opportunities, etc.;

- users of local roads, transport services and public rights of way both on and in proximity to the Site;
- ecological habitats and species present both on and in proximity to the Site;
- surface and groundwater regimes both on and in proximity to the Site, including Site drainage characteristics;
- the landscape character of the Site and its surrounding environs;
- sensitive receptors that would be introduced to the Site as a result of the Proposed Development, including site workers and future residents, potentially school children, tenants and other site users who would be present during the later phases of construction; and,
- effects on climate through GHG emissions during the construction and operation phase.

2.3.2 Consideration of whether these receptors are likely to be affected, and if so, to what extent, is provided in each technical assessment chapter (Chapters 7 – 17).