

CHAPTER 2: THE PROJECT SITE AND ITS SETTING

2.1 SITE DESCRIPTION

- 2.1.1 The Project Site, identified on the Site Boundary Plan (Figure 1.1), extends to 35.97 hectares (ha) and is located to the north west of Thornbury, South Gloucestershire; approximately 1.2km from the town centre. The grid reference for the centre of the Project Site is ST 63348 91723.
- 2.1.2 The Project Site is bound by Oldbury Lane to the north, Park Mills Farm and associated buildings to the west and south, and the consented Park Farm development to the east; discussed further in Chapter 5.
- 2.1.3 The land is relatively level, lying at approximately 10m AOD in the west, and sloping gently eastwards to around 15m AOD by the eastern boundary.
- 2.1.4 The Project Site is predominately in agricultural use and comprises agricultural fields divided and bordered by areas of hedgerow, woodland and ditches.
- 2.1.5 Approximately 7.1ha of the Project Site is classed as Grade 4 agricultural land, 3ha is Grade 3b. 10.3ha is Grade 3a and 14.4ha is Grade 2 (see Figure 14.1 and Chapter 14).

2.2 LAND USE AND PLANNING POLICY DESIGNATIONS

- 2.2.1 SGC's Adopted Policies Map indicates that the Project Site is largely outside of the Settlement Boundary; which runs continuous with the eastern boundary of the Project Site along the line of the committed development to the east (Park Farm – see Table 5.3).
- 2.2.2 There are no designations on the Project Site.
- 2.2.3 The emerging Policies Map (draft Joint Spatial Plan) doesn't identify any designations or constraints on the Project Site. Part of the wider Thornbury Green Infrastructure network encroaches into the south of the Project Site, linking to the committed green infrastructure delivered as part of the Park Farm development (see Table 5.3) to the east.
- 2.2.4 An identified Active Travel Route traverses the Project Site at the north-east; along the route of footpath OTH/18.

2.3 TRANSPORT AND ACCESS (SEE CHAPTER 9)

- 2.3.1 The Project Site is bounded by Oldbury Lane to the north, which is a single carriageway road with grassed verges on either side, and it is not street lit. It is currently subject to the national speed limit. There are no footway or cycle facilities provided along Oldbury Lane.

- 2.3.2 To the east of the Project Site, Oldbury Lane leads to Butt Lane, also a single carriageway road with one lane in each direction, and subject to a 30mph speed limit. Butt Lane forms a staggered priority junction with Gloucester Road; which is an urban road with a 30mph speed limit which extends to the town centre of Thornbury.
- 2.3.3 Thornbury connects to the A38 to the north-east (with Gloucester Road near the village of Whitfield) and to the east/south-east via signalised junctions at A38/B4061 at Alveston and A38/Grovesend Road/Tytherington Road. The A38 is a strategic A-road which runs from Devon to the Midlands, providing access to Bristol.
- 2.3.4 To the east of the A38 is the M5, and can be accessed from Thornbury at Junction 14, near Falfield to the north, or Junction 16 near the M4/M5 interchange to the south. The M5 runs between Exeter and Birmingham, and provides an alternative road to Bristol.
- 2.3.5 There are two Public Rights of Way through the site, OTH/13 and OTH/18, alongside a wider network of footpaths throughout the existing residential area of Thornbury. There are a number of key cycle routes within 1km of the Project Site; including National Cycle Route 410 (Avon Cycleway), National Cycle Route 41 and a Local Cycle Route (Thornbury Loop). These are shown at Figure 9.3.
- 2.3.6 There are existing bus stops and services within 800m of the (centre of) the Project Site; and the consented Park Farm site will extend these services, with new stops and services moving closer to the Project Site (within 600m of the centre of the Project Site). These are shown at Figure 9.4.
- 2.3.7 There are a range of pedestrian and cycle routes connecting the Project Site to local facilities and services, and Thornbury Town Centre, as illustrated on the plan at Figure 9.3.

2.4 HYDROLOGY AND DRAINAGE (SEE CHAPTER 8)

- 2.4.1 The Pickedmoor Brook flows east to west through the Project Site. Approximately 300m upstream of the Project Site is an unnamed watercourse that branches off the Pickedmoor Brook and rejoins it approximately 100m downstream of the Project Site. The Pickedmoor Brook flows into low-lying coastal land managed by the Lower Severn IDB. There are a number of minor field drains across the Project Site.
- 2.4.2 Alongside the Pickedmoor Brook, there are associated areas of Flood Zone 2 and 3; with the majority of the Project Site within Flood Zone 1. The Level 2 SFRA states that the area in the vicinity of the Project Site is prone to groundwater emergence.
- 2.4.3 The western edge of the Project Site is identified as at risk of tidal flooding, but benefitting from the protection of existing defences.

2.5 AIR QUALITY AND SOURCES OF NOISE (SEE CHAPTER 10 & 11)

- 2.5.1 There are no Air Quality Management Area's (AQMA) declared by SGC within close proximity to the Project Site; the nearest 12km to the south, and therefore not affected by the Proposed Development. SGC deploys NO₂ diffusion tubes at a number of locations, including one on Thornbury High Street; with monitoring between 2012 and 2016 at this station well below the relevant objectives. Estimated background concentrations for the Project Site have been obtained from DEFRA's national maps (2018), which confirms that background concentrations are well below the objective at all locations. The Thornbury Wastewater Treatment Works are located approximately 300m west/north-west of the Project Site, and is a small treatment plant.
- 2.5.2 Environmental sound surveys confirmed that the dominant noise source on the Project Site is Oldbury Lane to the north.

2.6 GROUND CONDITIONS

- 2.6.1 A Combined Phase 1 and Phase 2 Ground Conditions Assessment (August 2018) is submitted alongside this ES. This indicates that the Project Site is topsoil overlaying the Mercia Mudstone Group. The vast majority of the Project Site has not been impacted by contamination and does not in general have a history of contaminative use. The Project Site is primarily agricultural fields and open areas. Localised contamination could be expected associated with agricultural site activities and processes but this is unlikely to be a site wide issue and levels of compounds if present in any localised areas are not expected to be significant.
- 2.6.2 The Project Site has remained greenfield since first available OS maps dating from 1880. Off-site land uses to be considered include the Thornbury Sewage Treatment works to the north-west, and on and off-site agricultural activities.

2.7 BIODIVERSITY (SEE CHAPTER 12)

- 2.7.1 There are no European designated sites within or immediately adjacent to the Project Site; however there are four European designations within 10km;
- Severn Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar Site: lie 2.8km to the west and are designated for their estuarine habitats, wintering bird and migratory fish populations;
 - Wye Valley and Forest of Dean Bat Sites SAC (approximately 9.5km north west);
 - Wye Valley Woodlands SAC (approximately 9.8km west); and
 - River Wye SAC (approximately 8.2km west).

2.7.2 One further statutory site of nature conservation value lies within 5km of the Project Site boundary. This is Severn Estuary Site of Special Scientific Interest (SSSI) designated for estuarine habitats and populations of waterfowl, invertebrates and migratory fish.

2.7.3 There are eleven non-statutory sites of nature conservation value within 2km of the Project Site; including Park Mill Covert Site of Nature Conservation Interest (SNCI) which immediately borders the western edge of the Project Site, and is designated as 'Ancient and Semi-Natural Woodland'.

Habitats

2.7.4 The Project Site is characterised by improved grasslands bordered by a network of hedgerows and ditches. There are a number of locally valuable (at Parish level) habitats within the Project Site, including: aquatic habitats (streams), scattered broadleaved trees, semi-natural broadleaved woodland, hedgerows (including some Important) and standing water (ponds). The location of these habitats are identified on the Phase 1 Habitat Plan shown on Figure 12.1.

Species

2.7.5 Species surveys were undertaken in 2016-2018, and identified the following:

Table 2.1 Site Survey Summaries

Feature	Survey Summary
Invertebrates	The Project Site was suitable for a range of common and widespread invertebrates. The watercourse does not support white-clawed crayfish.
Amphibians	A small population of GCN recorded to the east of the Project Site and the habitats in the north east of the Project Site are likely to represent terrestrial habitat for the local population. Common frog and palmate newt identified within the Project Site.
Reptiles	The Project Site supported a low population of slow worm.
Birds	Habitats within the Project Site support a typical range of farmland species, including some Priority and notable species such as mistle thrush, dunnock and stock dove.
Bats	Surveys identified activity for a range of species. No evidence of bat roosts was recorded.
Hazel Dormouse	No evidence of hazel dormouse was found in Project Site.
Otter	Otters utilise the minor watercourses on an occasional / infrequent basis; the presence of holts or resting places was considered very unlikely.
Badger	Two main setts were recorded within / adjacent to the Project Site.
Hedgehog	The Project Site provided suitable habitat for this species.
Brown hare	The Project Site provided suitable habitat for this species.
Plants	Bluebell widespread in suitable habitat. The presence of significant populations of other notable plant species was considered unlikely.

2.7.6 Further details on ecology and nature conservation is provided in Chapter 12.

2.8 ARBORICULTURAL (SEE TECHNICAL APPENDIX 13.2)

2.8.1 An Arboricultural Impact Assessment and Method Statement has been undertaken for the Project Site, and is included in Technical Appendix 13.2.

2.8.2 The tree survey identified the following assets within the Project Site: 75 individual trees (2 Cat A, 29 Cat B, 35 Cat C and 9 Cat U); 13 tree groups (3 Cat B and 10 Cat C); 9 hedgerows (8 Cat C and one Cat U) and 3 Cat B woodlands. It also identified four Veteran Trees.

2.8.3 The Park Mill Covert to the west of the Project Site includes Ancient Woodland.

2.9 LANDSCAPE (SEE CHAPTER 13)

2.9.1 The Project Site does not fall within any national or local landscape designations.

2.9.2 Natural England identify the Project Site within a transition zone, between the National Landscape Character Area (NCA) 106 'Severn and Avon Vales' to the north and west, and NCA 118 'Bristol, Avon Valleys and Ridges' to the south and east. Albeit, as expressed in Chapter 13, the characteristics of the Project Site identify more strongly with NCA 106.

2.9.3 South Gloucestershire's Landscape Character Assessment (2014) identifies the Project Site within 'Area 18 Severn Ridges'.

2.9.4 Further details on landscape and visual context of the Proposed Development and Project Site are provided in Chapter 13.

2.10 ARCHAEOLOGY AND CULTURAL HERITAGE (CHAPTER 7)

2.10.1 There are no designated, or any known undesignated heritage assets within the Project Site. Within the wider study area, there are a number of listed structures, including the Thornbury Castle complex circa 400m south of the Project Site (comprising the Grade I listed main house and associated enclosing walls, two lodges to the south which are Grade II listed, and a Scheduled Monument and Registered Park and Garden within part of the site), the Church of St Mary the Virgin (Grade I listed), and further listed buildings at Shieling School and a number of former farmhouses, residences and barns. These are shown on Figure 7.1.

2.10.2 Further details on designated and undesignated heritage assets are provided in Chapter 7.

2.11 SUMMARY OF SITE FEATURES AND SENSITIVE RECEPTORS

2.11.1 Initial investigations for the site analysis identified:

- Potential noise impacts from traffic along Oldbury Lane;

- Pickedmoor Brook and associated watercourses;
- Flood Zones 2 and 3 within southern part of the Project Site;
- Public rights of way across the Project Site;
- Park Mill Covert SNCI;
- Trees and hedgerows, and neighbouring Ancient Woodland; and
- Protected species.