

4 Alternatives Considered and Design Evolution

4.1 Introduction

- 4.1.1 Schedule 4 of the Environmental Impact Assessment (EIA) Regulations requires the Applicant to provide *“a description of the reasonable alternatives studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.”*
- 4.1.2 This chapter describes the reasonable alternatives considered by the Applicant, including the ‘do nothing’ scenario, and documents how the design of the Proposed Development has evolved, taking environmental effects into account.

4.2 ‘Do Nothing’ Scenario

- 4.2.1 The consideration of alternatives, as required by the EIA Regulations, should address the evolution of the Site, in the absence of the Proposed Development. This is known as the ‘do nothing’ scenario.
- 4.2.2 The Site is dominated by a single agricultural field, bisected by a public bridleway/footpath and is currently used for growing arable crops.
- 4.2.3 In the ‘do nothing’ scenario, it is reasonable to assume that the Site would comprise the continuation of the existing baseline, as outlined above and set out in **ES Volume 2, Chapter 2: The Site**.
- 4.2.4 Policy CSP 2: Housing Provision of the Tandridge District Core Strategy¹, states that Tandridge District Council (TDC) will make provision for a net increase of at least 2,500 dwellings in the period 2006 to 2026. The continued use of the Site as existing would mean that the Site would fail to contribute to key housing policy aspirations for Tandridge.
- 4.2.5 Continuation of the existing land use would mean that the following would not be provided on the Site:
- Up to 190 new residential dwellings (including 49% affordable);
 - An 80-bedroom care home;
 - New public open space, retained woodland and play space;
 - Pedestrian, car and cycle access; and

¹ Tandridge District Council, (2008); Tandridge District Core Strategy

- Associated infrastructure works and landscaping.

4.2.6 In view of the above, it is reasonable to assume that in the absence of the Proposed Development, the Site would likely remain as arable land in the future.

4.3 Alternative Sites

4.3.1 The updated NPPF has established a revised approach to calculating local housing need based up a new standard method. In Tandridge's case, this has the effect of increasing the annual housing requirement from 634 dwellings per annum, to 1012 dwellings per annum. The updated NPPF also requires Green Belt to be revised in helping to meet housing needs in full, that will require the Council to prepare a new Local Plan for consultation that will need to identify additional land for housing development if needs are to be met.

4.3.2 As such, the Site is considered a priority to ensure that future planned housing numbers for the Tandridge area are achieved and that a sufficient number of homes can be delivered throughout the new development plan period.

4.3.3 In addition to the above, alternative sites for the Proposed Development have not been considered as the Site is the only one being considered under the Applicant's control.

4.3.4 In these circumstances, whereby alternative locations are not explored, it is an accepted approach to look at the reasonable alternatives studied by the Applicant on the Site; this can include design options and iterations.

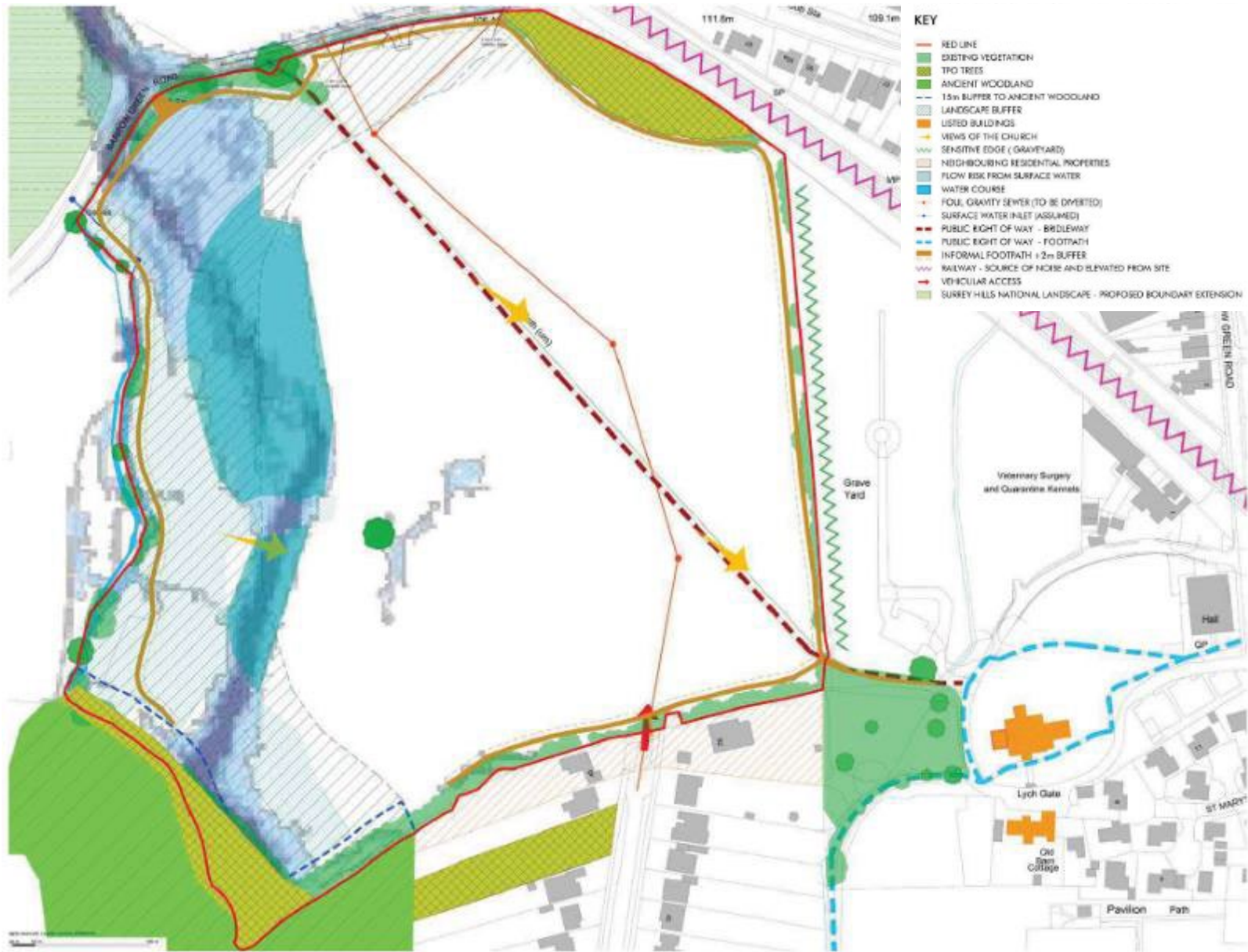
4.4 Design Evolution

4.4.1 The design development process is considered in detail in the Design and Access Statement (DAS) which has been submitted in support of this Application.

4.4.2 The design team undertook a comprehensive review process of the constraints and opportunities on the Site to establish the parameters within which the outline masterplan could come forward to achieve the objectives of both the Applicant and the local authority.

4.4.3 The key constraints of the Site are illustrated in **Figure 4.1** below.

Figure 4.1: Site Constraints Plan

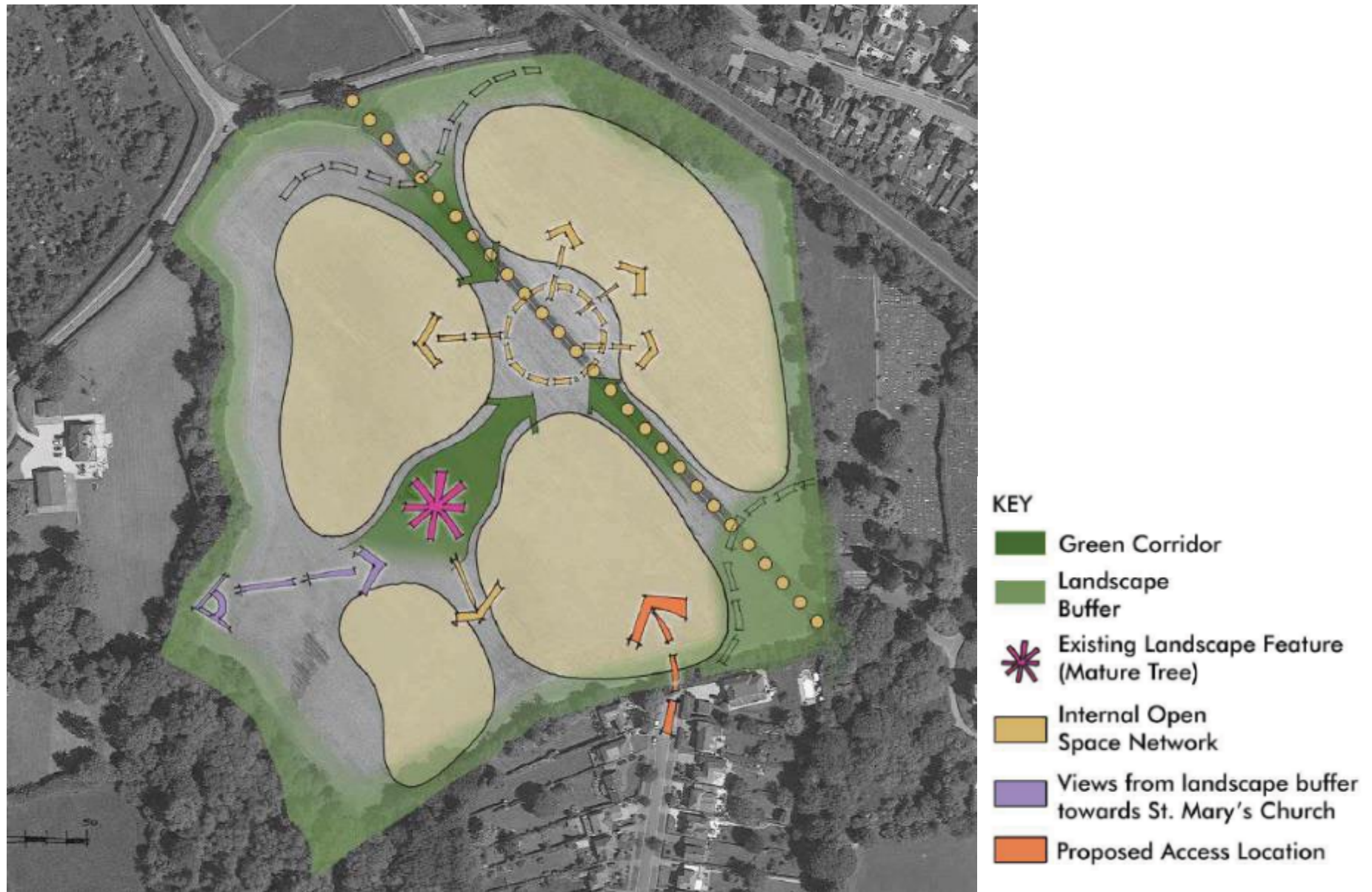


4.4.4 The key constraints include:

- **Public Rights of Way (PRoWs):** An existing PRoW runs through the Site, which has been safeguarded and will be enhanced through the design.
- **Topography:** The highest point of the Site is along the northeastern edge, which bounds the railway line. From here, the Site falls gradually towards the woodland beyond southwest boundary of the Site. Therefore, careful consideration of drainage has been integrated into the design.
- **Drainage and Flood Risk:** The Site is entirely located within Flood Zone 1, however there is a low, medium and high risk surface water flood flow path through part of the Site. Therefore, surface water modelling was undertaken to inform the drainage strategy and the Site's topography has dictated the location of the new SuDS features. These will be located along the western boundary of the Site.
- **Surrey Hills National Landscape:** The Surrey Hills National Landscape is located approximately 500 m to the north of the Site. Due to the sensitive location, the Proposed Development has been designed to be well integrated with the adjoining development and well assimilated into the landscape and settlement of Oxted.
- **Ancient Woodland and Trees:** Several of the trees scattered around the boundaries and the single Ash within the field are covered by Tree Preservation Orders (TPOs), together with the copse to the northeast and the Ancient Woodland to the south-west. A 15 m buffer zone has been applied in the design of the Proposed Development to ensure that all TPOs and woodlands have an appropriate stand-off and, where possible, a greater stand-off has been applied.
- **The Bogs:** The Bogs potential Site of Importance for Nature Conservation (pSINC) is an area of broadleaved Ancient Woodland adjacent to the Site's southern and eastern boundaries. Therefore, the Proposed Development has been designed to not obstruct the flow of water from the spring that supplies water to The Bogs. Additionally, surface water runoff will be directed to SuDs in the south-west of the Site, which will help to filter out any pollutants, prior to infiltration.
- **Heritage:** The Site lies to the north-west of the Church of St Mary, a Grade I listed building, therefore the potential for views from this area have been carefully considered when siting boundary planting and built form.

4.4.5 The key opportunities for the Proposed Development are illustrated in **Figure 4.2** below.

Figure 4.2: Design Opportunities Plan



4.4.6 The key opportunities include:

- **Housing Need:** The Proposed Development will provide a dwelling mix relative to the community need, meet high built quality and internal space standards, and provide appropriate affordable housing.
- **Care Home Facility:** The Proposed Development will provide an up to 80-bedroom care home facility in the northeastern corner of the Site.
- **Location and Connections:** The Proposed Development will serve as a sustainable location for development due to its proximity to Oxted Station and Oxted Town Centre.
- **Open Space and Play Space:** The Proposed Development will provide new open spaces and play spaces, which will positively influence physical activity.

4.4.7 The constraints and opportunities fed into the initial masterplan concept which outlined the proposed locations of residential development, care home, green infrastructure, roads and footpaths presented in **Figure 4.8**. This masterplan concept was developed in line with the following principles:

1. **Sensitive Building Heights** – Oxted is predominantly a residential town, consisting of mostly two-storey detached and semi-detached residential houses. Within the town centre near the train station, where the density is greater, there is an accompanying greater building height, including three-and four-storey buildings. In keeping with the area and in context of the nearby Surrey Hills National Landscape, building heights of the Proposed Development range from two to two-and-a-half stories.
2. **A logical location for new homes** – The Site forms a logical development opportunity being located near Oxted Station, adjacent to the existing settlement edge to the south and the M25 to the north.
3. **Retain existing landscape features and public footpath** – The Site's existing landscape features, such as trees and hedgerows, are to be retained to provide structure and character to the proposed green infrastructure framework. The existing public footpath will remain and will be framed with a tree-lined path, serving as an established pedestrianised pathway running north to south through the Site.
4. **Respecting areas at risk of flooding** – The areas at risk of surface water flooding along the western boundary of the Site are to remain free from development as integral parts of the development's network of connected green spaces.
5. **Accommodating Sustainable Drainage (SuDs)** – New drainage features will form an integral part of the green infrastructure and will provide both landscape and ecological benefits as well as enhancements.

4.5 Pre-application Discussions, Consultation and Engagement

4.5.1 The draft layout was then used for the basis of a discussion with TDC in a pre-application meeting which took place on 27th June 2024. This discussion focused on the setting and presentation of the scheme; the main points presented are detailed below:

- **Settlement** – The proposal of development on the Site would extend the settlement of Oxted to the north-west, however as shown in **Figure 4.3** below, would sit within the extents of the town's settlement edge further to the north and south-west.

Figure 4.3: Settlement Pattern of Local Area



- **Access & Movement** – The key pedestrian and cycle route of the existing Public Right of Way was placed as the highest priority to ensure this route would have minimal road crossing and offer a safe and direct route into the town centre. Key focuses, as shown in **Figure 4.4** below, included:
 - Existing PRoW - suitable width for pedestrian and cycle users offering direct route towards the town centre;

- Informal Pedestrian routes - linking the public open spaces and offering a winding route through the landscape buffer;
- Green Street - extending from the main vehicle access off Wheeler Avenue into the centre of the development;
- Tertiary Streets - providing access into the residential areas; and
- Edge Lanes - proposed where the dwellings overlook the outer landscape buffers or where roads may run parallel with the PRoW central to the Site. The intention is for a shared surface to minimise the width and amount of hard standing.

Figure 4.4: Initial Access & Movement Considerations



- **Amount & Tenure** – The scheme proposes 190 new dwellings set out to meet a mix. This mix proposed a spread of different sized properties, with one bedroom apartments and maisonettes, two bedroom houses, along with family sized accommodation. Affordable dwellings were initially proposed at 44% of

the overall proposals, and was designed to be spread throughout the development so they are not all located in one area. These early considerations are shown in **Figure 4.5** below.

Figure 4.5: Initial Accommodation & Tenure Plan



- Type of Housing** – The different building typologies proposed across the Site ensure that the denser building types are located centrally to the development, away from more sensitive parts of the Site such as facing the outer landscape edge or to the southeast around the new open space connecting with St. Mary's Church. This is demonstrated in **Figure 4.6** below. These denser buildings (apartment buildings and terraced houses) front onto the existing PRoW, providing a good level of natural surveillance to ensure a safe route for pedestrians/cyclists into the town centre. Lower density types of buildings, such as detached houses, were suggested around the edges of the site with parking set between the dwellings rather than in front, to minimise massing along these edges.

Figure 4.6: Initial Housing Type Plan



- **Storey Heights** – The storey heights plan followed a similar principle to the above, with taller buildings proposed centrally to the development. The landscape buffer and open spaces provide good opportunity for new planting to form landscaped screening of these buildings. The initial building heights proposed are presented in **Figure 4.7** below.

Figure 4.7: Initial Building Heights Plan



4.5.2 It should be noted that formal feedback following the meeting was requested, however TDC have yet to provide this.

Public Consultation

4.5.3 The consultation phase occurred in two phases, the first was held from Wednesday 5th July to Wednesday 19th July 2023. The second took place between Wednesday 3rd July and Sunday 28th July 2024.

4.5.4 For the second consultation phase an in-person public event was held on the 15th July 2024 at Oxted Community Hall, 53 Church Lane, Oxted, Surrey, RH8 9NB.

4.5.5 The exhibition was attended by the members of the design team and the Applicant and 34 feedback forms were received from those who visited the website or the community drop-in session.

4.5.6 The below main points were raised by members of the public following both phases of engagement:

- Desire for healthcare along with care sector services in Oxted;
- Desire for more affordable housing in the area;

- Emphasis on sustainability and biodiversity measures being embedded into the design;
- Concern for the potential impact on the local road network;
- Concern regarding Oxted's infrastructure to support an additional population, for example a shortage of capacity for doctors, dentists, and schools; and
- Concern raised regarding the development of a greenfield Site.

4.5.7 The design team have taken on board the comments and reviewed them to investigate whether they can be incorporated into the scheme as it progresses through the design process. Full details of the public consultation are provided in the Statement of Community Involvement which accompanies the planning application.

Figure 4.8: Initial Masterplan Concept



4.6 The Final Scheme

- 4.6.1 The Illustrative Masterplan (**Figure 4.9**) builds upon the concept and design principles that have been developed through in depth analysis of the Site and its surrounding context, taking into consideration comments from the local authority and the public consultation.
- 4.6.2 The Illustrative Masterplan has been designed to create a residential development that integrates with the existing settlement edge of Oxted. The new homes will be supported by a care home, new traffic-free routes for walking and cycling, and areas of open space, including two children's play areas.
- 4.6.3 The Illustrative Masterplan shows how there will be two separate primary access roads for vehicles; one onto Barrow Green Road and one at the end of Wheeler Avenue. An integral part of the design has been ensuring that these roads do not intersect, thus preventing non-development traffic from using the Proposed Development as a cut through. This guarantees that the potential impact of traffic on Wheeler Avenue is controlled.
- 4.6.4 The tree-lined primary streets will provide links onto the separate combined foot/cycle Public Right of Way, which will form a key part of the development's active travel routes to encourage walking and cycling within both the Site and to existing areas of Oxted. This will be supported by an informal pathway that will run around the perimeter of the Site, which will establish a circular walk through the development's open spaces along the western boundary and will connect to access points along the northern and southern boundaries.
- 4.6.5 The area of open space along the western boundary will retain and enhance the existing boundary features with the addition of new native woodland, thicket and tree planting. The western part of the Site will be laid-out as a semi-natural area of open space, incorporating new Sustainable Drainage (SuDS) features which will be embedded into the landscaping.
- 4.6.6 A range of play areas will be provided across the Site to cater for varying age groups and provide engaging and challenging play experiences, with a natural timber feel in keeping with its location at the edge of the settlement.
- 4.6.7 A Locally Equipped Area of Play (LEAP) will be provided within the arrival open space to the north near the Site entrance from Barrow Green Road. The LEAP will offer a variety of equipment targeted for ages 4-12 yr olds and encourage active and imaginative play. The new dwellings will be orientated to provide passive surveillance of the open space and play area.
- 4.6.8 Additionally, a large area of public space is provided at the centre of the Site, which will include a Super Locally Area of Play (LAP), to provide dedicated toddler play on site.



4.7 Environmental Considerations and Comparison of Effects

- 4.7.1 Throughout the design of the Proposed Development, various iterations of the Proposed Development (as outlined above) were explored to retain and enhance the existing Site for biodiversity and minimising the environmental effects, whilst maintaining sufficient development potential of the Site.
- 4.7.2 During the design process, key environmental studies were undertaken, and advice sought from the project's technical specialists, to assess the impact of the Proposed Development and further improve the design of the Proposed Development. The environmental studies undertaken, and advice sought from the project's technical specialists, related to flood risk and drainage, noise, transport, ecology, heritage and landscape.

Flood Risk and Drainage

- 4.7.3 Specific consideration was given to the location of the surface water drainage attenuation basins in relation to the development parcels. As stated in **ES Volume 2, Chapter 2: The Site**, there is currently a low, medium and high-risk surface water flood flow path through part of the Site.
- 4.7.4 On reviewing the EA data and site characteristics there was uncertainty with regard to the actual extent of the surface water flood flow path through the Site which would potentially significantly limit the development potential of the Site. As such it was decided to undertake more detailed surface water modelling to assess site suitability and inform the drainage strategy as well as the proposed site layout. The modelling results showed a reduced surface water flood flow path extent that can be diverted with a slight lowering of ground levels (typically 100-300mm) along the western boundary, coupled with a raised development platform above the peak modelled flood levels. This increases the developable area of the Site. The diverted conveyance route will be provided through open space along the western boundary of the Site, thus routing the surface flooding (when it occurs) away from the built development.
- 4.7.5 Modelling demonstrates that this is feasible without increasing flood risk onsite, or offsite. **Figure 4.10** shows a preliminary plan illustrating the proposed conveyance route for surface water flooding.
- 4.7.6 **Figure 4.11** shows a comparison plan which demonstrates there is a -10mm decrease downstream as a result of the proposals.
- 4.7.7 These early considerations have been refined through the design iteration process and the final drainage strategy (as submitted with this application) demonstrates how the conveyance route for surface water flooding will be applied to the Proposed Development.

Figure 4.10: Proposed Conveyance Route for Surface Water Flooding

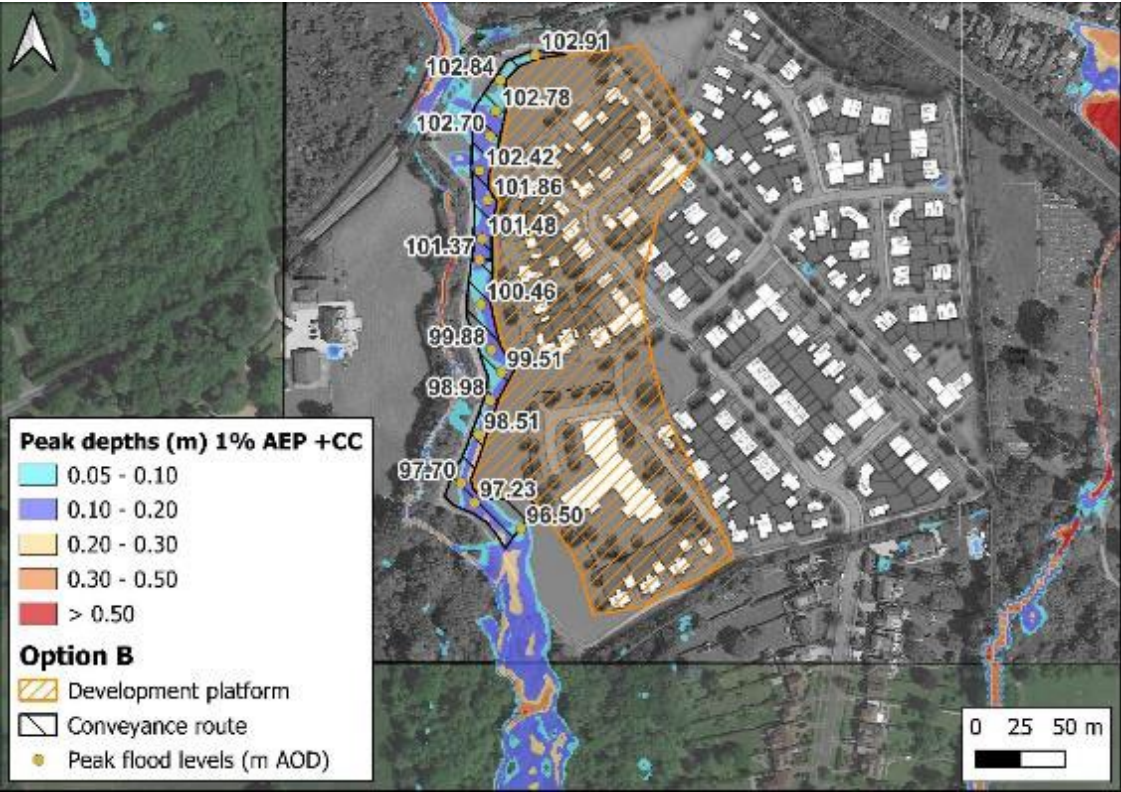


Figure 4.11: Comparison Plan



4.7.8 Additionally, there is a wet woodland located in the southwest of the Site. Groundwater monitoring wells were installed in this area with trial pits subsequently

excavated near the spring. The surveys showed that groundwater levels were below ground both when moving away from the saturated land associated with the spring and when land levels rose.

- 4.7.9 As such, built form has been kept out of the wet area, and no buildings have been located either between the watercourse and the wet area, or within 10m of the wet area. This will minimise any effect upon the ground water flow which will continue in a northwest to southeast direction. The ground levels of the Proposed Development will also be approximately 700mm-1000mm higher than existing levels in the southwest of the Site to ensure there is a low risk of groundwater flooding at the surface.

Noise

- 4.7.10 A noise survey was undertaken between 4th October 2024 and 11th October 2024. The results confirmed that the noise environment at the Site primarily includes contribution from road traffic on Barrow Green Road, with secondary rail noise contribution from the Oxted Rail Line affecting areas to the north west.
- 4.7.11 Good acoustic design principles, such as buffer zones from noise sources, were incorporated into the design of the scheme early to minimise the potential for significant effects relating to noise. This has resulted in the built development being offset from Barrow Green Road, thus putting greater distance between the proposed receptors and the main source of noise. Additionally, the design of the development has ensured that there are dedicated play spaces available in quieter areas, away from Barrow Green Road and the railway line.

Transport

- 4.7.12 The initial road designs of the Proposed Development considered a primary and secondary access onto Barrow Green Road and Wheeler Avenue, respectively. Due to the bend on Barrow Green Road, located directly north of the Site, careful consideration was given to the location and type of access points onto this road.
- 4.7.13 Both pedestrian and vehicle access was refined through the design process to ensure the safest and most practical entrance/exit. Additionally, early designs featured through-access for vehicles between the north and south, as shown below in **Figure 4.12**.

Figure 4.12: Initial Framework Plans



- 4.7.14 Through the consultation process, concern was expressed that this would encourage non-development traffic to use the Site as a cut through, resulting in additional traffic build-up on Wheeler Avenue. As such, the development plans were amended to ensure that the northern and southern parcels of the Proposed Development are served by separate roads that do not connect. In turn, this splits the development traffic across two separate entrances, thus reducing the impact of traffic on Wheeler Avenue.

Ecology

- 4.7.15 An initial UK Hab Habitat survey was undertaken on the 30th March 2022 (as shown in **Figure 4.13**) which informed the design considerations.

Figure 4.13: Habitat Map



- 4.7.16 The Site is not covered by any statutory or non-statutory wildlife site designation and is not in close proximity to any statutory designated site – the nearest being Woldingham and Oxted Downs SSSI which is separated from the Site by the M25. Development within the Site is considered unlikely to result in any direct or indirect adverse impact on any SSSI.
- 4.7.17 The nearest ecological site that has been considered is The Bogs pSNCI (potential Site of Importance for Nature Conservation), an area of broadleaved ancient woodland adjacent to the Site's southern and eastern boundaries. As such, development plans have ensured that The Bogs and the adjoining woodland are protected with a 15 m minimum standoff buffer (up to a maximum of 45 m) between the built form and the ancient woodland boundary.
- 4.7.18 Additionally, due consideration has been given to the surface water flow from the Site into The Bogs, and the conveyance route (as detailed above) will ensure that the existing level of water flow to the area is maintained. Therefore, the Proposed Development will not compromise the existing ancient / wet woodland and associated habitats that are dependent on existing run-off from the Site

Heritage

- 4.7.19 Early assessment work was undertaken, alongside pre-application engagement with Historic England, Tandridge District Council and Surrey County Council, to enable identification and assessment of the relevant heritage assets. Of the listed buildings and structures in the local area, the closest to the Site is the Church of St Mary the Virgin (Grade I) located approximately 80 m to the southeast.
- 4.7.20 The Site currently makes a limited contribution to the significance of the listed building due to:
- The vegetation that creates a physical separation between the Church and the Site; and
 - The changes to the local landscape over the years, such as the construction of dwellings on St Mary's Close and Wheeler Avenue in the 20th century.
- 4.7.21 The development of the Site, as proposed, will lead to a low degree of less than substantial harm to this significance. This harm will be caused by the alteration to the footpath from the north-west, approaching the Church.
- 4.7.22 Design measures have been developed to ensure that the proposals respond to the setting and significance of the Church of St Mary, such as the improvements to the Public Right of Way that currently runs through the Site leads directly to the base of the Church of St Mary. Improvements to the PRoW include replacement of the soil track with a sealed surface pathway and vegetation will be planted along the route. Species will be selected which provide amenity value, and also benefit wildlife through varied structure and the inclusion of plants which benefit pollinating species. This ornamental planting will include flowering trees, bulbs and flowering meadows.

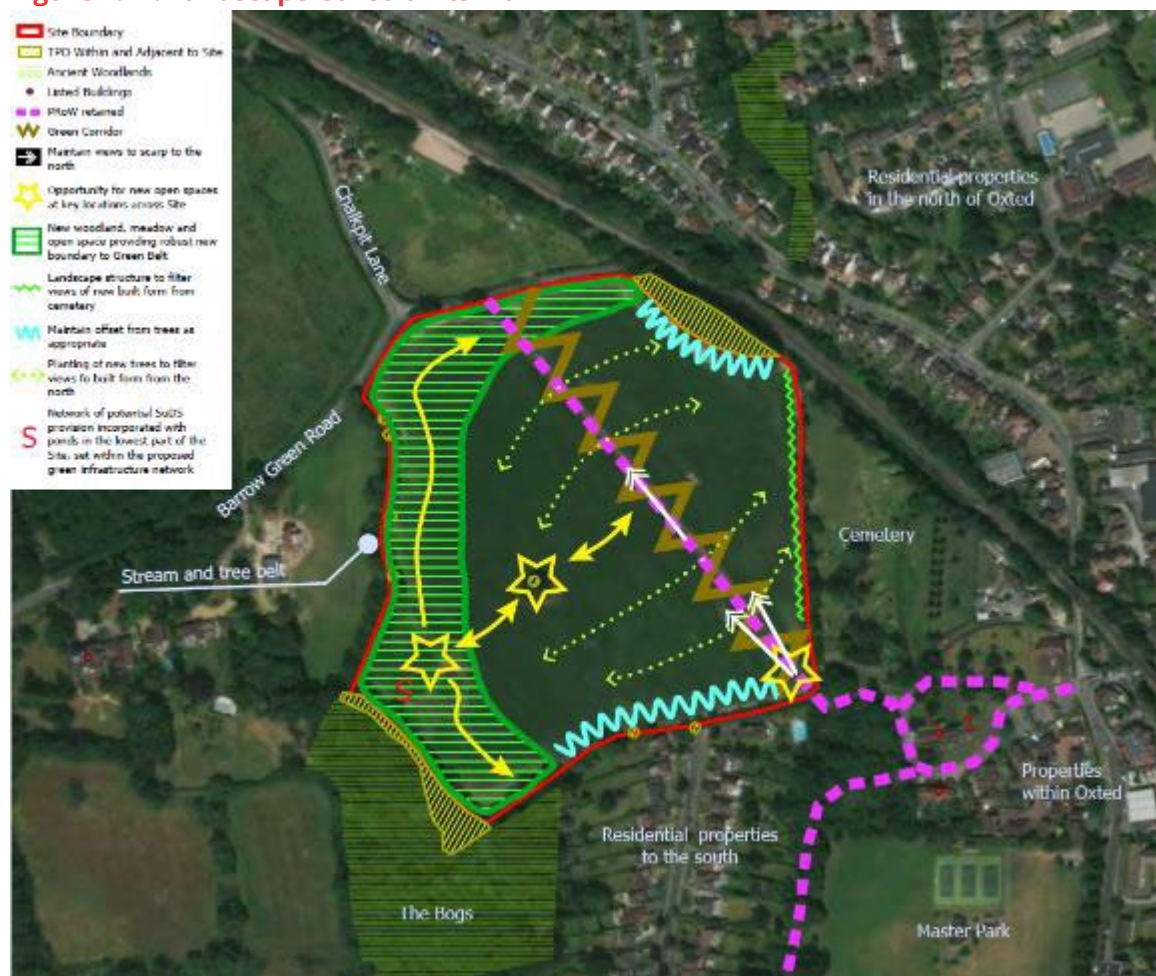
Landscape

- 4.7.23 An initial landscape appraisal was undertaken to assess the potential constraints and opportunities specifically relating to landscaping onsite, as shown in **Figure 4.14** below.
- 4.7.24 The appraisal found that the Site makes limited to no contribution to the Green Belt, nor would its development affect the setting and special character of the historic town. However, it is also recognised that development on the Site would inevitably result in some encroachment. Therefore, the boundaries of the Proposed Development have been designed to include reinforcement measures in the form of boundary planting that would provide a robust new permanent and defensible edge to the Green Belt in this location.
- 4.7.25 There are reciprocal views to and from the Site and scarp within the Surrey Hills National Landscape, however, this is not uncharacteristic of the wider landscape given the elevated nature of the scarp. Therefore, the Proposed Development has

been designed to fully address the sensitive views from the north by implementing sympathetic heights of the buildings and boundary planting. It is also well assimilated into the landscape and settlement of Oxted, while maintaining views to the scarp.

- 4.7.26 The development of the Site would be visible from the scarp to the north, however, would be seen in the context of the rest of the built form within Oxted in the Holmesdale Valley, set beyond the M25 and the woodland which forms the northern framework to Oxted.

Figure 4.14: Landscape Constraints Plan



4.8 Summary and Conclusions

- 4.8.1 An alternative location for the Site was not investigated as this is the only site in the Applicant's control.
- 4.8.2 In the absence of the Proposed Development, the Site would likely remain as an arable field and would, therefore, not be able to contribute to Tandridge District Council's provision of housing and affordable housing targets. Additionally, public play space that could be used by the new and neighbouring residents would not be provided.

- 4.8.3 The masterplan has been developed through a number of iterations taking into account the Site's constraints and opportunities, to develop a Proposed Development which has resulted in the retention of key landscape and ecological features, increasing the provision of play space and enhancing the amenity benefits.
- 4.8.4 Environmental studies (relating to topics such as flood risk and drainage, noise, transport, ecology, heritage and landscape) have been used throughout to advise, inform and refine the design of the Proposed Development to reduce environmental effects, where feasible.