7. Landscape and open space

The primary consideration of the landscape setting is to retain and enhance all of the high quality landscape features such as the woodland, parkland trees and connectivity of the hedgerows and ditches. Overall, these provide a unique opportunity to set development within a mature and attractive setting offering instant scale, character and enclosure which significantly minimises the visual effects of the development to the immediate boundaries.

The landscape strategy has developed around the following objectives:

Objective 1 - To retain, enhance and protect the longevity of the existing mature key features and habitats

This will be achieved by:
- Excluding development from any identified ‘protection zones’ around key features;
- Allowing for the connectivity of the features to be maintained within any layout;
- Providing a strong Green Infrastructure defined in part by the connectivity of the woodland mosaic, parkland, ditches, wildflower grassland and hedgerows; and
- Replace existing urbanising Conifer M3 boundary with acoustic bund and fencing densely planted with suitable native species to reflect the adjoining corridor planting.

Objective 2 - To provide a wide range of recreational opportunities for the proposed residents and visitors

This will be achieved by:
- Creating a significant Open Space strategy that delivers well in excess of the policy requirements (both current and emerging);
- Providing a range of landscape experiences.
from the circa. 14ha SANG to informal parkland, parks and gardens, potential informal and formal sports provision, allotments, community orchard and informal and equipped areas of play for all ages; and

- Creating well defined and easily accessible links between the various public open spaces.

Objective 3 - To create a well landscaped, self contained visual and contextual setting

This will be achieved by:

- Enhancing the features that currently contribute to the character to provide a long term benefit - i.e. large parkland trees, hedgerows and grasslands with a careful balance of formal and informal to retain the semi-rural nature and parkland character;
- Enhancing the site’s current boundaries to maximise the screening and rural characteristic experienced from the adjoining roads and Bridleway; and
- The M3 boundary will be replaced by acoustic bunding, fencing and native planting which once established will provide screening of a more beneficial and characteristic nature.

Objective 4 - To provide a wide range of connected landscapes and habitats through strong Green Infrastructure

This will be achieved by:

- Ongoing management of the retained/created woodland to provide a series of rides and glades;
- Providing opportunities to create heathland habitat if suitable opportunities arise;
- Protecting and increasing the species rich grassland/wildflower meadows within the site;
- Ensuring and enhancing the connectivity of the existing hedgerows through increases in species diversity and management;
- Providing an ongoing programme of removal for non native species such as Rhododendron and some Conifers (including M3 boundary) - to be programmed to retain the boundary integrity;
- Creating SUDS ponds and ditches managed for habitat; and
- Planting of a community orchard.
The illustrative layout has been designed to avoid the location of any residential development within the 400m avoidance zone as set out within the Interim Avoidance Strategy for the Thames Basin Heaths Special Protection Area (SPA) - November 2010.

In addition, the site has been looked at to provide an initial appraisal of the potential for future residents to impact upon the SPA’s within the locality. This primarily reflects upon the ability for residents to easily access the SPA and their potential cumulative effects with existing visitors, and secondly on the ability of the site to provide a self-contained resource that would mitigate the need.

In relation to accessing other identified SPAs, the initial appraisal identified the following:

There is only one Public Right of Way associated with the site. BW1, 2 and 3 form a west to east route beyond the northern boundary of the site which continues towards the Hawley Common SPA, approximately 2km northeast.

To the west, the Bridleway extinguishes at Minley Road with any further pedestrian/cycle or horse riding required to use the narrow verges along the busy Minley and Blackbushes Road. This is considered a strong detractor to residents accessing the SPA to the west.

To the east, the Common provides opportunities for circular routes however these are truncated from the Bridleway by the A327. The Bridleway itself does not form part of a wider circular route and passes through MoD restricted access land, reducing opportunities for dogs to be off the lead or access off the Bridleway.

The land to the north of the Bridleway and site is also subject to MoD restriction, restricting movement northwards.

There is potential access along a private track from Fleet to the east of the site. This joins the Bridleway to the northeast corner of the site. The SANG within the site will provide a closer resource with more opportunities for circular walks and landscape experiences.

The initial SANG strategy plan is considered to be able to deliver all of the ‘Must Haves’ and the majority of the ‘Desirables’ set out within the Interim Avoidance Strategy Guidelines. A full table including a site based narrative can be found in Chapter 8.0 of the Baseline Landscape and Visual Assessment.

In summary these are:

- Provision of a 14.61ha SANG which will provide both for the site and a wider strategic level.
- The SANG lies within 400m of the proposed development and is easily accessible via several proposed links and adjacent public open spaces.
- The existing access to the Bridleway will be closed up so that the SANG remains enclosed.
- There is sufficient space to allow for parking for visitors. The car park has been positioned to provide direct access to the SANG, it is...
also located next to the community facilities that can be used as an information point and provide further surveillance of the car parking area.

- Opportunities for several circular routes utilising existing well defined tracks within the woodland - these include a 2, 2.3 and 2.5km route.

- The footpaths have been located along existing well used and defined forestry tracks and will be managed as part of the future woodland rides and glades.

- Dense areas of Rhododendron will gradually be replaced to create clearer under-storey. The exception will be the boundaries which will be replaced by species to create a thick and ‘spiky’ deterrent to leaving the site.

- The majority of the SANG will weave through an existing Ancient Woodland. Large swathes of public open space have been positioned to provide a further buffer between the SANG and the housing.

- The main character of the SANG will be determined by the Ancient Woodland and proposed meadow grassland (including the SINC); the SANG will comprise a variety of habitats overall. Other opportunities for habitats will be considered such as small areas of clearance to create pockets of grassland and, potentially, heathland, and the links to other public open spaces.

- The SANG is located away from the influence of the M3 and has no other potential ‘intrusions’.
9. Access strategy

The Site is bounded by B3013 Minley Road to the west, offering an excellent opportunity to connect the proposed residential development into the existing local highway network. B3013 Minley Road connects to Fleet Town Centre to the south and Yateley to the north. In this regard, the proposed development would provide an improved access junction to Minley Road probably in the form of a 'ghosted tight turn'. There are a number of options for the location of the junction; it could be in the location of the existing site access, or alternatively further south of the existing access to tie in with the existing on-site road.

A spine road would route through the development site to provide access to the individual development parcels. A primary school could be located towards the west of the site to ensure good accessibility to/from Minley Road.

The overarching principles of movement for the proposed development are predicated on the provision of a high quality sustainable links to serve development land parcels within the site and to improve accessibility to the wider area.

Connections to public transport would be made through enhancing existing routes as described above. Local bus services could be extended into the site and would run along the development spine road. The local bus connections will provide access to the local rail stations, including Fleet for rail travel towards London and the south coast.

Connections to Fleet rail station would also be via walking/cycling along B3013 Minley Road. To accommodate these movements, new footway will be required to make the connections with the Ancells Road Roundabout. The highway verge is sufficiently wide along B3013 from the site access to and over M3 that provision of a footway would be feasible. The bridge over M3 would therefore not prevent connections being made to the south for pedestrians and cyclists.

Additional secure and covered cycle parking at the rail station could be provided if demand exceeds current capacity, to enhance the opportunity for combined cycle/rail trips. Discussions with public transport operators, public rights of way officers and cycling officers will also be undertaken to ensure that suitable options are available for sustainable travel. Public transport services, pedestrian and cycle networks will be enhanced and developed in consultation with the key stakeholders to ensure that local infrastructure is both suitable and attractive to new and existing residents.

The movement strategy aims to create a sustainable community which is less reliant on the private car and is accessible to all modes of travel. A comprehensive area wide Travel Strategy will be developed and implemented to minimise the number of private car based trips to/from the site, particularly single occupancy vehicle trips, and to increase travel by sustainable modes.

Thakeham is fully committed to implementing, monitoring and reviewing a Travel Plan and will implement remedial measures to ensure future mode share targets are achieved. The strategy will be implemented in the context of a Travel Plan Framework, with measures introduced to incentivise new residents to make use of the sustainable transport options available in the vicinity of the site and in the local area.

Consultations will be progressed with Hampshire County Council (HCC) regarding access to the proposed development site. A full assessment of the impacts of the development on the local and strategic highway networks will be completed. The assessments will include modelling of the local highway network at specific junctions to ensure that any mitigation required can be developed within the context of the masterplan proposals, in consultation with Highways England and HCC. It is anticipated that there will be some improvements required to local junctions to improve or increase their capacity in order to reduce congestion and mitigate the impact of the development. Junction improvements will be implemented where necessary along the Minley Road corridor from Fleet to the south and to the north towards Yateley.

In summary, the site at Brook House, Fleet is available and deliverable and offers a great opportunity to enhance local transport infrastructure with wider benefits to the existing community, thereby creating a sustainable integrated community for local people. There are no high level technical transport or highways constraints which would prevent the site from progressing, therefore the site is available, deliverable, and suitable for new residential development.
Railway Station
Secondary School
Primary School
Primary School (proposed)
Fleet Town Centre
Local Centres
Hospital
Playing fields
Key route for cycles between the site and town centre
Key route for walking between the site and town centre
Employment area
Bus stop
10. Flood risk and drainage

The development proposals at Brook House adopt the sequential approach to spatial planning to locate all residential and educational development in appropriate flood risk zones in accordance with the National Planning Policy Framework.

The adoption of this approach not only ensures that the risk of flooding to the development itself would be minimised, with an annual probability of flooding of less than one percent, but enables the incorporation of the existing floodplain into the wider landscaping strategy.

A key focus of the development proposals is the use of a holistic approach to master-planning in accordance with Policy 12 and Policy MG3 of the Local Plan. Areas currently shown to be at risk of flooding will be utilised to provide natural parkland and recreational facilities, whilst the existing on-site drainage regime has been carefully incorporated within the development proposals with all major existing overland flow routes retained. This provides the desired synergy between green infrastructure provision, ecological enhancement, flood risk management, and amenity value.

The Environment Agency’s Flood Map for Planning shows peak flood extents produced by a hydraulic model which is not considered appropriate for development scale flood risk appraisal. Consequently, a comprehensive numerical modelling exercise is being undertaken using industry leading software benchmarked and approved by the Environment Agency for the use of flood risk estimation in the UK.

A two-dimensional (2D) hydraulic model of the site and the surrounding hydrological catchment has been produced to inform the current development proposals. The modelling will continue to be refined, in consultation with the Environment Agency, as the project progresses and will incorporate one-dimensional (1D) channel survey data to define the peak flood extents in sufficient accuracy to support a future planning application.

The peak flood extents at Brook House given by the current 2D hydraulic model confirm that the flood risk at the site is governed by a combination of surface water and fluvial flooding from Minley Brook. It shows that there is minimal fluvial flood risk posed to the site from Fleet Brook as the embanked M3 and Minley Road effectively isolate the site from the watercourse.

As the site is predominantly underlain by the Windlesham Formation an infiltration based drainage solution is unlikely to be feasible. Consequently, surface water runoff generated by the Proposed Development would be limited to the greenfield runoff rates prior to discharge to Minley Brook. The development seeks to replicate the natural drainage regime through the use of existing drainage features for the conveyance of surface water and exceedance flows during extreme storm events. A combination of source control and site control Sustainable Drainage Systems (SuDS) techniques, such as permeable paving, swales, and/or attenuation basins, can be readily incorporated within the development proposals to attenuate the surface water prior to discharge to Minley Brook. Opportunities for maximising additional water quality, amenity and biodiversity benefits will be sought throughout the ongoing development of the proposals with landscaped features such as attenuation basins and swales incorporated within the wider landscaping strategy.
Strategic attenuation basins to manage surface water generated by the development. Options for incorporation of additional SuDS features to be sought to maximise additional benefits.

Incorporation of existing floodplain into wider landscaping strategy to maximise amenity and biodiversity opportunities.

Adoption of sequential approach to locate all residential and educational land uses in areas with a low or very low flood risk.

Development to replicate the natural drainage regime by retaining existing drainage network and overland flow-routes.

Safe access and egress provided during extreme flood events via Minley Road.

Flood risk and drainage strategy plan
11. Noise mitigation strategy

Site

Mouchel has provided a high level review of noise at and in proximity to the proposed development site, based on publicly available information.

Through a review of Defra’s Strategic Noise Mapping, daytime road traffic noise levels within approximately 150m of the M3 motorway are predicted to be greater than 65 dB LAn16. Noise levels between about 150m and 300m of the M3 are predicted to be greater than 60 dB LAn16h, with the remainder of the site predicted to be greater than 55 dB LAn16h.

During the night road traffic noise levels within approximately 200m of the M3 motorway are predicted to be greater than 60 dB Lnight. Noise levels between about 200m and 400m of the M3 are predicted to be greater than 55 dB Lnight, with the remainder of the site predicted to be greater than 50 dB Lnight.

Development of the site will need to consider and show how the design minimises the impacts of noise, with mitigation to control noise clearly identified and secured through planning conditions.

Mouchel completed baseline monitoring surveys in May 2017 to establish existing noise levels at sample locations selected to be representative of the proposed built extent of the development. The survey procedure and method were agreed in consultation with Hart District Council Environmental Health.

Measurements were taken at three locations, including two long term unattended measurements (covering typical weekday and weekend period) and a short term attended measurement. The measured noise levels will be used to assess the suitability of the site for proposed development, additionally, levels will be used to set noise thresholds for construction works.

Masterplan Options

The proposed masterplan has been considered in terms of potential noise impacts on sensitive receptors (i.e. residential, education and community building). The primary school and community building are sensibly located. Both the primary school and community building are set back from the M3 motorway and will therefore experience lower noise levels than other parts of the development site. In addition, the masterplan shows residential buildings will provide shielding, thereby further reducing levels.

Another pragmatic design element shown on the masterplan is a buffer zone between the southern residential extent and the M3 motorway. This land could be used to incorporate noise mitigation into the design, for example, an earth bund with an acoustic barrier on top.

An acoustic barrier which completely hides the source from the receiver can reduce noise levels by up to 10 dB. Initial calculations show that a buffer zone approximately 50m wide from M3 will include a bund with 2.8m acoustic fencing on top to hide the noise source from residential properties. Further assessments will be required to ensure the masterplan design progresses to mitigate the impact from the existing noise sources on any new sensitive receptors.

For properties still exposed to higher noise levels, closed windows/sealed facades may be required to achieve internal levels. If noise levels in gardens are likely to exceed 55 dB LAn16h, the development may need to provide access to a quieter external amenity space (ideally for sole use by a household, alternatively a limited group of households).

Next Steps

A noise impact assessment for the proposed development will be completed, based on the results of the noise monitoring surveys. Noise level criteria have been provided by Hart District Council, where noise is predicted to exceed these target levels then potential mitigation shall be investigated and appropriate measures proposed. The methodology for the noise assessment would be agreed through consultation with the Hart District Council.

In addition to the initial appraisal of development options, the outcomes of both the baseline monitoring survey and detailed noise impact assessment will enable potential adverse local noise impacts to be identified at an early stage of the planning process.

The site will be considered in terms of external and predicted internal noise levels, and where significant adverse noise impacts are predicted as a result of the development at existing and/or proposed sensitive locations, mitigation measures would be identified for inclusion within the design of the final masterplan.

In line with advice received from Hart District Council Environmental Health, the use of a sealed façade strategy to achieve internal noise levels shall be minimised; rather, the use of layout, orientation, spatial design and non-building envelope mitigation shall be fully investigated first.

This would ensure there are no showstoppers to development in terms of noise. If any buildings within the development include mechanical ventilation, then equipment shall be designed so as to not cause a negative impact on existing or proposed receptors.
13. The benefits of development

- **Primary School**
- Managing the Flooding across the site and beyond
- **100** construction jobs per year
- **500** new homes
- **Community Hub**
- Over provision of S.A.N.G.
- Easy access to Fleet Town Centre
- **10 minute walk to Railway Station**
- **190 jobs** on and off site
- **£5.2m Community Infrastructure Levy (CIL)**

*anticipated CIL (once adopted) based on 2015 Draft Charging Schedule*
14. Delivery

The site is currently being promoted for allocation within Hart District Council’s Local Plan to assist in meeting the Objectively Assessed Housing Need (OAHN) and draft policy housing requirement.

It is anticipated for the Local Plan to be submitted to the Secretary of State in Spring 2018, with Examination to follow in Summer 2018. The plan will be adopted shortly after, dependent on the timescales of the Examination and the requirement to undertake any modifications.

A planning permission will be secured soon after adoption.

Either an outline consent will be sought for the site, with reserved matters applications submitted following consent, or a ‘hybrid’ application will be submitted which will also include detailed designs of the first phase of development.

The development at Brook House is anticipated to commence on site in late 2018.

It is estimated for the site to deliver approximately 75 dwellings per annum, leading to an overall site timescale of 6-7 years, therefore completing in 2025-2026.

* based on the Local Development Scheme Sixth Revision (April 2017)