

Lodge Hill Development Brief

December 2011



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About this document

This Development Brief sets out the council's policies, expectations and ambitions for the new settlement at Lodge Hill.

This document was approved by Medway Council's Cabinet in December 2011, following a formal consultation process. The consultation was in accordance with the council's Statement of Community Involvement, following best practice for engagement work. Further details of the consultation process are provided in Section 7 and Appendix 1.

Policy CS33 of the emerging Medway Local Development Framework Core Strategy makes a strategic allocation of land at Lodge Hill for a new settlement, and sets out key principles that will have to be followed in its development. This Development Brief expands on Policy CS33. It provides more detail about how the council considers the site should be developed. The Development Brief also considers the potential impact of the new settlement on the wider area.

EG1 ➔ Text in this format is a key principle that has to be complied with by future developers.

The remaining text provides context and guidance to inform these key principles. It is relevant in determining future applications but does not have as much weight as the principles themselves.

The Development Brief is a material consideration in the determination of any planning applications for the Lodge Hill site. The development of Lodge Hill is expected to take at least 15 years and the Development Brief will provide a consistent guide and framework for developers over the time period.

Following the adoption of the Core Strategy, it is the council's intention to approve the Lodge Hill Development Brief as a Supplementary Planning Document. However this version has been prepared to meet all the requirements for a supplementary planning document.

Related documents

All planning policies have to be assessed to make sure that we understand what the impacts of the proposals are. In this case, as the Development Brief is an expansion of the policies set out in the Core Strategy, many of the assessments required have been carried out to support that document. In particular, a sustainability appraisal has been carried out on the Core Strategy at various stages. A Habitats Regulations Assessment is required as the development may have an impact on the special protection areas and Ramsar sites at the Medway and Thames estuaries. This has also been carried out for the Core Strategy. These documents are available on the Council's website at:

www.medway.gov.uk/ldf.

More detailed assessments of the impact of the Lodge Hill development will take place as part of the planning applications for the site.

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Chapter one

Introduction





- 1.1 The vision for Lodge Hill, below, is set in the draft Core Strategy. It shows what the new settlement should be like when it is complete. It underpins Policy CS33, the Lodge Hill policy in the Core Strategy, and will underpin the eventual proposals for the site. The rest of this Development Brief is intended to help make this vision a reality. The concept plan, overleaf, is also from the Core Strategy and shows, at a broad level, how the principles set out in the policy influence the form of the development to come.

A Vision for Lodge Hill

Lodge Hill will be a sustainable and integrated community, capitalising on its exceptional setting, complementing and supporting nearby settlements and the Hoo Peninsula as a whole. It will be a distinctive place that connects to the surrounding rich countryside, with a land use pattern that minimises the need to travel. It will be an exemplar for the Thames Gateway in the way that it minimises its impact on the environment and provides for an excellent quality of life for all its residents. It will also, over time, become an important focus for higher value economic activities, taking advantage of its location between urban Medway and the existing and emerging industries at Grain and Kingsnorth. It will be a resilient place that is capable of adapting to environmental, social and other changes over the long term.

- 1.2 The Core Strategy also sets seven development principles for Lodge Hill. These inform all the guidance in the Development Brief. The thread that links them is the need for Lodge Hill to be an exemplar of sustainable development. This is not just about how it reduces its impact on the environment and responds to climate change. Just as crucial is how the new community is established and the quality of life that Lodge Hill provides for its own residents and the wider community.
- 1.3 The development principles for Lodge Hill are:
- **Strong character** – making the most of the natural landscape and military heritage to create a distinctive and attractive place with a strong identity and a legible hierarchy of spaces and places.
 - **Active community** – a diverse, inclusive, vibrant and creative local culture encouraging pride in the local community and achieving a sense of mutual support and well being.
 - **Environmentally sensitive** – design, infrastructure, delivery and management that respect and enhance the natural environment, conserve natural resources and support people to lead sustainable lifestyles.
 - **Well connected** – bringing people together and to jobs, schools and services in an efficient, safe, affordable and uplifting way, both within the new settlement and between Lodge Hill and surrounding communities
 - **Thriving economy** – achieving a high quality, prestigious employment offer, unique to Medway and complementary to Medway's economic vision. Prosperous and diverse, Lodge Hill's economy will provide a range of training, employment and business opportunities.

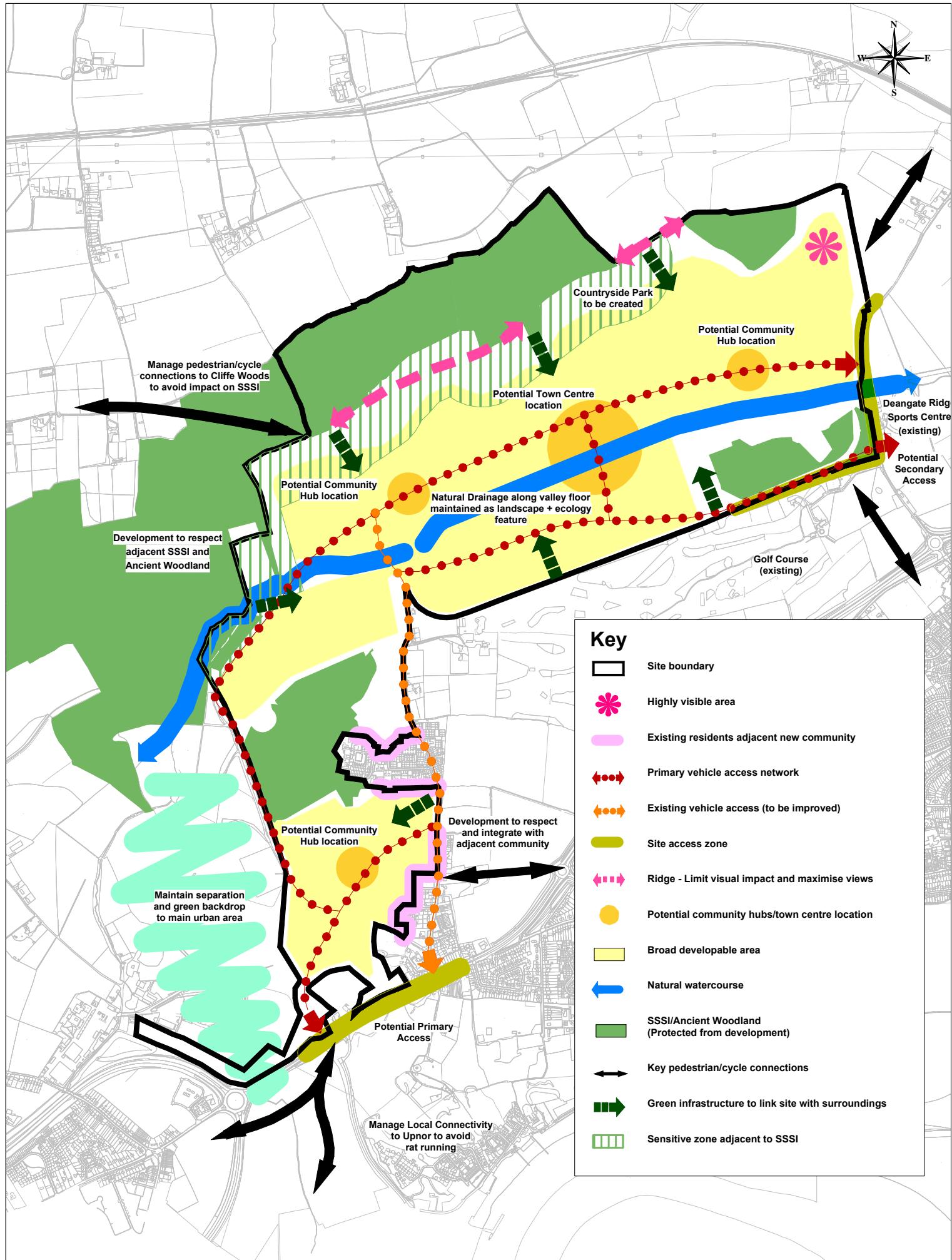


Fig. 1.1: Lodge Hill Concept Plan

- **Well served** – allowing the community within Lodge Hill and beyond to benefit from public, private and voluntary services that are accessible to all and meet people's needs and aspirations.
- **Well run** – effective engagement and participation by local people, groups and businesses in the planning, design and delivery of Lodge Hill, with a sustainable management model and effective leadership, governance and participation of the community in the long-term stewardship of Lodge Hill.

The site and surroundings

- 1.4 Figure 1.2 shows the boundary of the strategic allocation, as set out in the Core Strategy.



Figure 1.2: Strategic allocation boundary

- 1.5 This Development Brief applies to a wider area, as it also considers the influence that the development will have on its surroundings, and vice versa. The boundary of the Development Brief is shown in Figure 1.5.
- 1.6 The character of the Lodge Hill site is dictated by its topography. Chatterden Ridge runs through the north of the site, Deangate Ridge is immediately to the south and a large proportion of the developable area of the site is hidden in the valley between. There is a broad, fairly flat area at the base of the valley, but in places the northern slope becomes quite steep. Deangate Ridge meets the high ground at Round Top Wood at the western edge of the site, and this divides the main Lodge Hill area of the site from the area at Chatterden Barracks and the existing village.

- 1.7 Historically, the ridges across the Peninsula would have been heavily wooded. The areas in and adjoining the site still retain large areas of woodland. Parts of Great Chattenden Woods, Lodge Hill Wood, Wybornes Wood, Deangate Wood and Round Top Wood are ancient woodland. There are also other wooded areas including shelterbelts along field margins. The Chattenden Woods Site of Special Scientific Interest (SSSI) is designated partly for the importance of its woodland habitat, and partly for its populations of woodland birds. This includes Chattenden Wood, Lodge Hill Wood and the area of grassland and scrub at Rough Shaw.

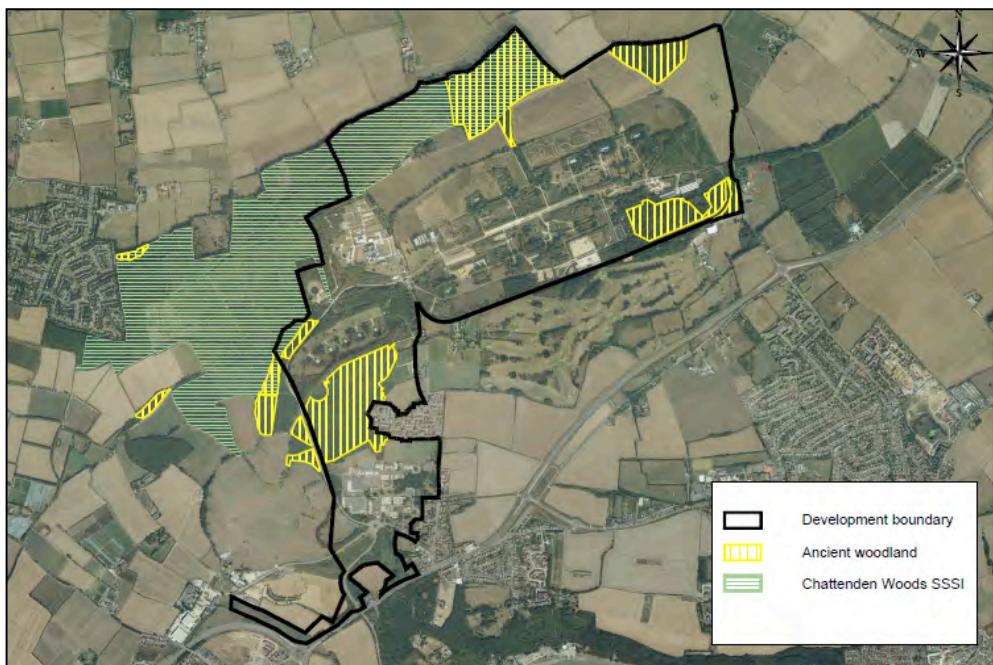


Figure 1.3: Existing woodland on site

- 1.8 The woodlands provide a green backdrop to Medway. Together with the area of farmland to their south (part of the Islingham Farm holding) they help to separate the rural Hoo Peninsula from the main built up area, which ends at the A289. This area is very prominent in views from the A289 both approaching and leaving Medway. Its importance as a buffer and a gateway will only be increased with the development of Lodge Hill so close to the main urban area.
- 1.9 The relationship of Lodge Hill to this area will make a strong statement about its character and intent.
- 1.10 The Ministry of Defence (MOD) has occupied land at and around Lodge Hill for well over 100 years. It is the current owner of almost all the allocated site (the remainder is council-owned highways land). The site has always been part of a network of military installations around the River Medway and was historically linked to the depot at Lower Upnor by a rail system. While Lodge Hill refers to the whole of the current development site, in fact this includes a number of distinct areas, which were developed in stages. Figure 1.4 shows the division of the site between these areas. Most recently, the whole site has been used for various forms of military training. This has also taken place on some of the adjacent farmland.

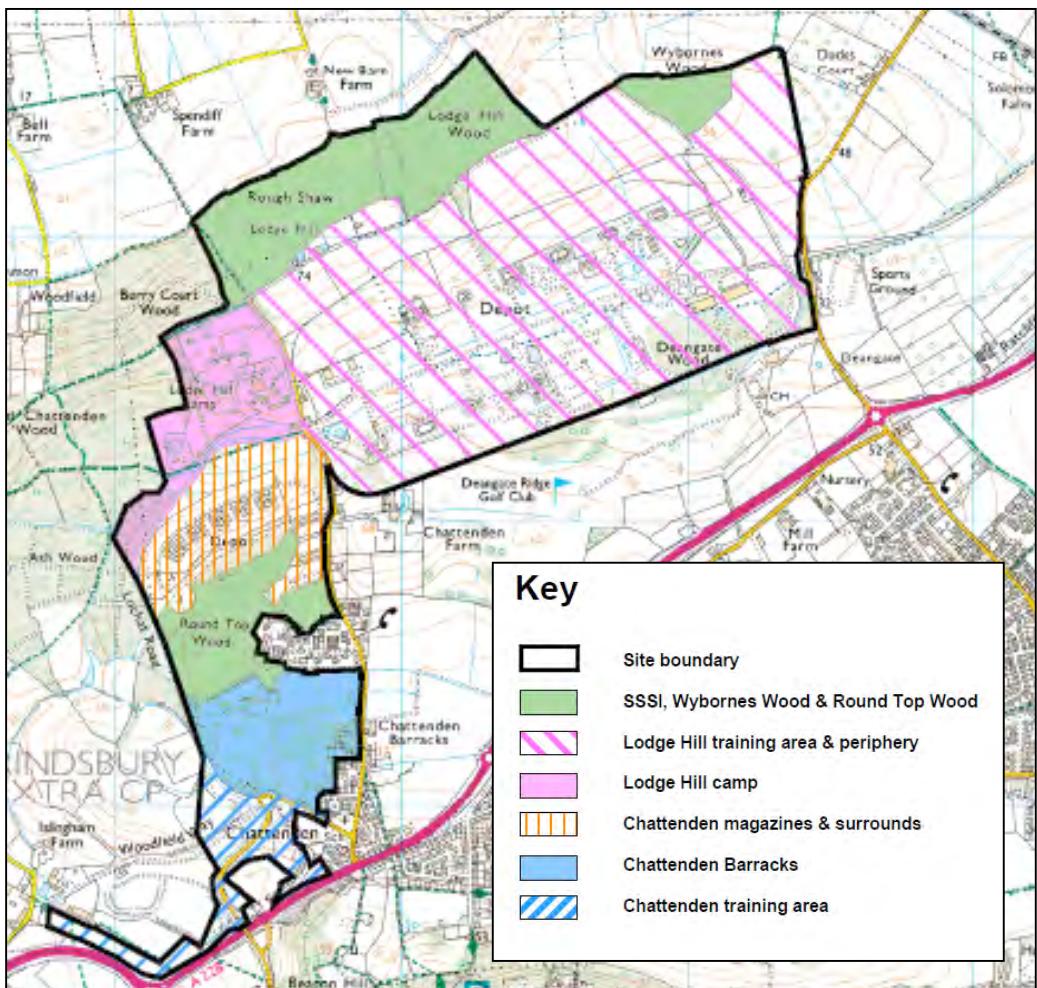


Figure 1.4: Historic divisions of site

- 1.11 The historical use of this site has left a wealth of military heritage, which is significant as part of Medway's military history. Many of the buildings and structures on site contribute to this significance.
- 1.12 Magazine sheds for the manufacture and storage of munitions are spread fairly evenly throughout the spine of the site, each with embankments to contain any explosion. The earliest were built in the late 19th century. The Chattenden Magazines (a group of five of these sheds) are secluded within a walled area to the north of Round Top Wood. Sadly, all of the magazine sheds have been much altered and damaged since their original construction. The Chattenden Magazines in particular have suffered from the effects of land slippage within their compound.
- 1.13 There is a large group of buildings and structures from the period of the First and Second World Wars. This includes a large number of pillboxes (sentry posts). Some of these were related to the defence of the site itself, while others were associated with the stop line across the Hoo Peninsula. This was one of a series of anti-tank measures created in case of invasion. Although the stop line itself is no longer visible, the remaining pillboxes are a reminder of its existence and link the history of Lodge Hill to the wider area. English Heritage has recently listed four of the First World War sentry posts, at Grade II. There is also an anti-aircraft station on Chattenden Ridge, which was built in 1913-14 in conjunction with one at Beacon Hill near Upnor. This may be

the first anti-aircraft battery in Europe and is certainly the first in the UK. Currently, it is in very poor condition.

- 1.14 Figure 1.5 shows a zone around the site boundary where the impact of development at Lodge Hill is likely to be greatest. This area includes the existing village of Chattenden, adjacent areas of farmland, existing leisure uses and Chattenden Woods SSSI. Changes and proposals within this zone will also have an impact on the new settlement. This represents the boundary of the Development Brief.
- 1.15 The Development Brief will also need to consider the influence of Lodge Hill across the wider area, including on other existing communities on the Peninsula. Figure 1.6 shows Lodge Hill in the context of the wider area.
- 1.16 The more detailed work that will have to be carried out in support of an outline planning application for Lodge Hill may identify other areas or types of impact. These will need to be fully assessed and considered through the planning application process.

Evidence base and current proposals

- 1.17 To support the Core Strategy allocation, a large site-specific evidence base has been assembled. This is in accordance with the requirements of current government planning policy in PPS12. It is based on an indicative masterplan for the site and is available on the council's website.
- 1.18 The indicative masterplan that has informed the Core Strategy may not be the one that is eventually granted planning permission and built out. However, the base information that has informed it is applicable to any proposal on the site. It has been referred to throughout this Development Brief and has helped to inform the policies in it.

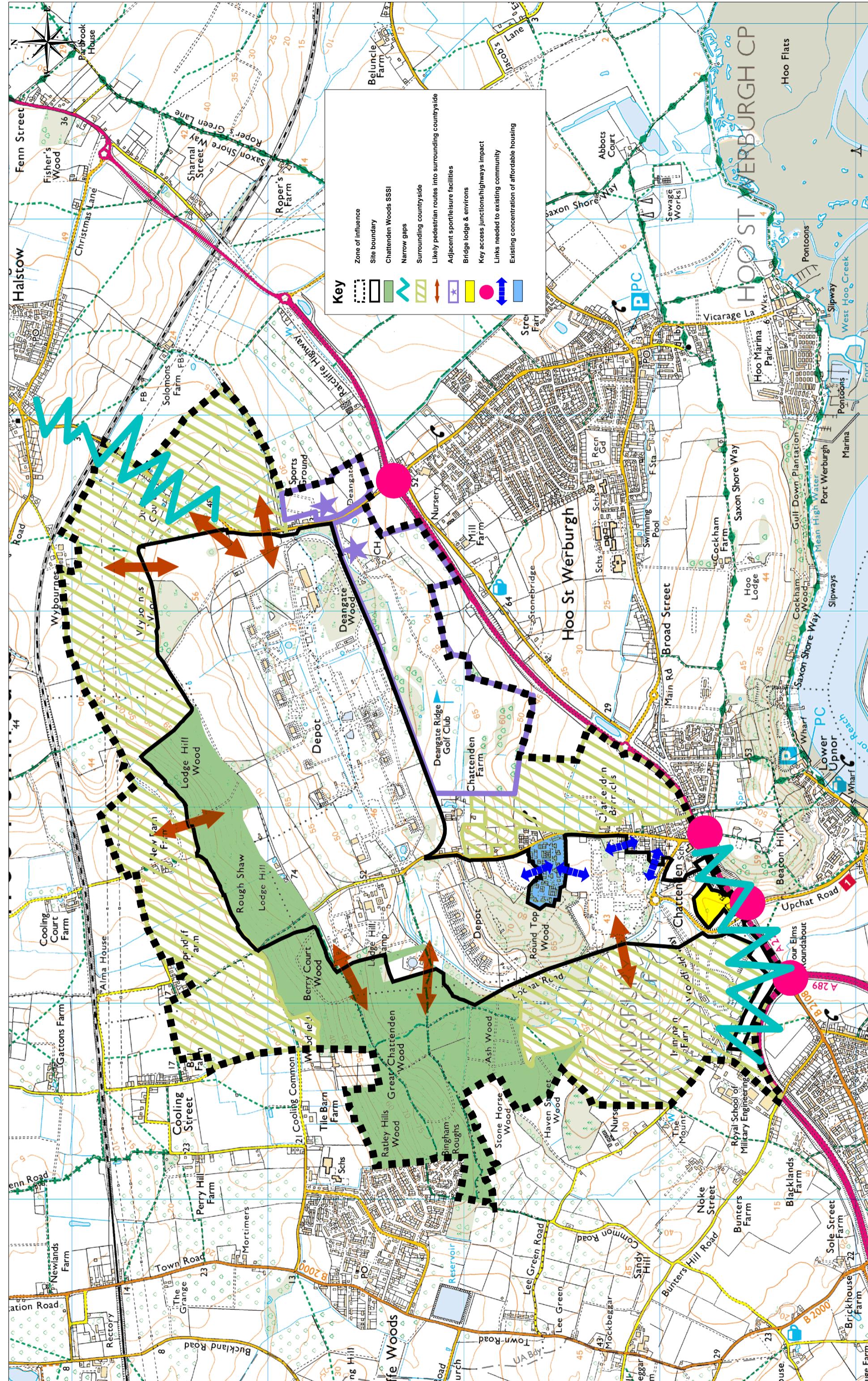
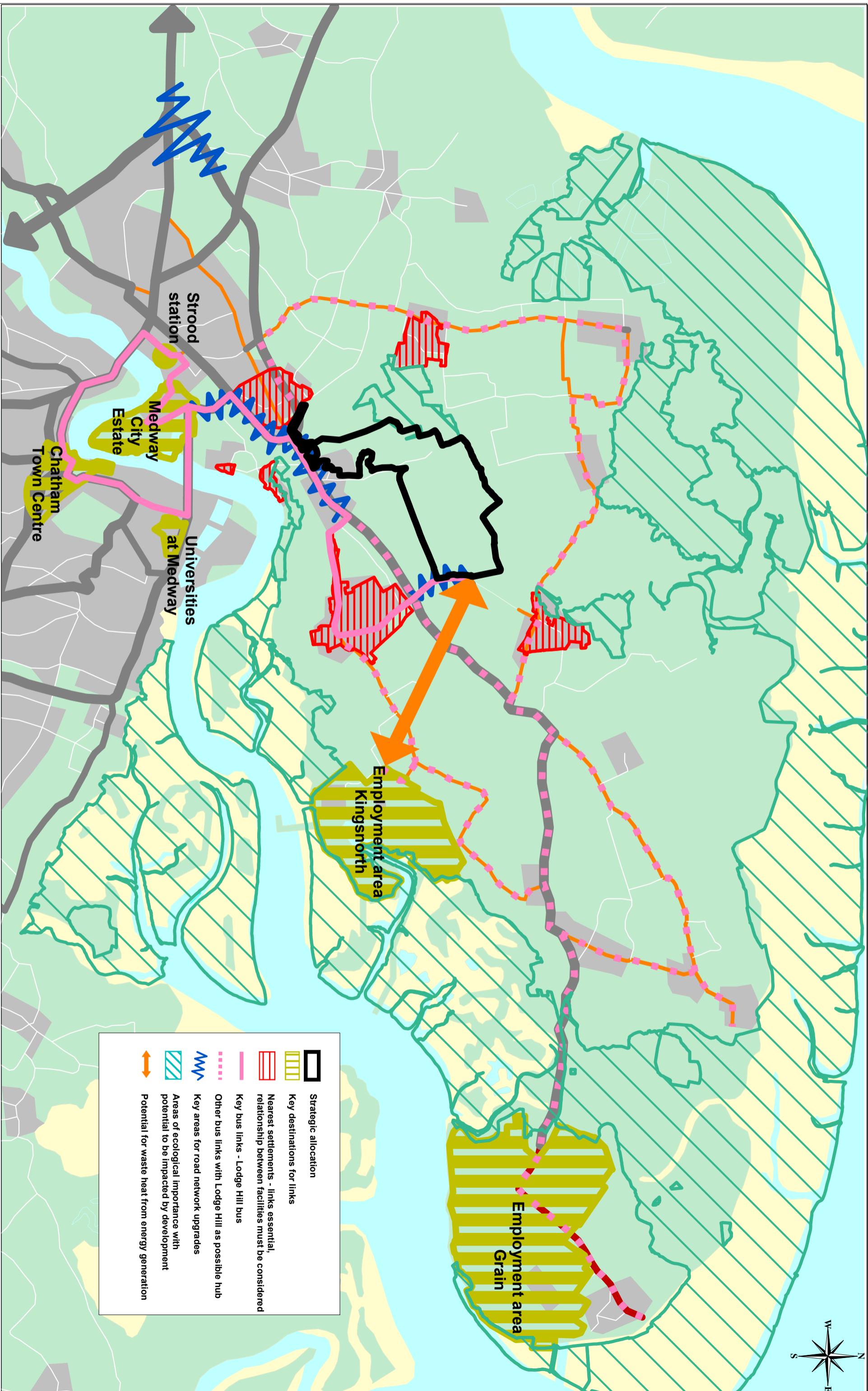


Fig 1.5 Zone of Influence

Fig 1.6: Lodge Hill connections



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Chapter two Community

- 2.1 The strength of the new community at Lodge Hill will be crucial to its success. Neither the council nor the developer can dictate how a community will grow or develop. However, the onus is on the developer to provide the right conditions for the community to develop naturally. Lodge Hill should be designed and delivered in a way that provides the best possible quality of life for its residents, workers and visitors, creating liveable neighbourhoods that encourage a healthy and sustainable lifestyle. This chapter sets out what can or should be done to provide those conditions.
- 2.2 It is also important that the existing community is not forgotten. Provision at Lodge Hill can serve this existing community as well as its own, and every effort should be made to integrate the two. A common theme of consultation regarding the site over the last few years has been concerns about the change that a development on the scale of Lodge Hill could cause to the local area. This is understandable given the current rural character of the Hoo Peninsula, which has no settlements of comparable size. How the developers address these concerns will have a bearing on the success of attempts to integrate the new and existing communities.

Housing

- 2.3 Lodge Hill will be a mixed-use settlement. However, housing will be by far the largest portion of development, by both land take and value.
- 2.4 The Core Strategy policy says that the site can accommodate around 5,000 residential units. The indicative masterplan produced to inform the Core Strategy shows options of either 4,500 or 5,000. The level of development that is finally proposed will need to be fully assessed by an outline planning application. The final capacity of each development parcel will then be determined at the detailed application stage.
- 2.5 A successful new community should include a wide range of housing types, from town centre flats to larger family houses and bungalows in lower density areas. This will provide the conditions for a mixed and inclusive community, and will meet a full spectrum of housing need.
- 2.6 Lodge Hill is Medway's only large development site outside of the waterfront and town centre regeneration areas. It should take the opportunity to concentrate on family housing. This will help to balance the higher proportions of flats and smaller units likely to be provided elsewhere. The rural setting also means that Lodge Hill has potential to accommodate executive housing: Large, high quality houses in more spacious plots. These should not dominate the housing mix but could add to the variety proposed.

C1 ➔ Development at Lodge Hill should include a wide range of housing types but family housing should form the majority of provision. It should also take the opportunity to provide some lower density executive style housing.

- 2.7 The quality of housing provided is very important. Policy CS15 of the Core Strategy requires all housing to meet the council's space standards and will apply to Lodge Hill. In addition, Lifetime Homes is a well-established standard designed to promote inclusive housing and enable people to remain in their home when their circumstances change. Its design standards provide benefits

for a wide range of possible users. As Lodge Hill is intended to be an exemplar of sustainability, housing on Lodge Hill should meet this standard.

- 2.8 It is accepted that some of the external requirements may be difficult to achieve on Lodge Hill due to site gradients in some areas. The Code for Sustainable Homes gives points for achieving Lifetime Homes standards and has an exception for steep plots. This approach can be adopted for Lodge Hill.

C2 ➔ All housing on Lodge Hill should aim to meet Lifetime Homes standards. Where the gradient of a plot is more than 1:15, there will be an exception to the need to meet criteria 2 and/or 3 for that plot.

- 2.9 Affordable housing will need to be provided in line with the Core Strategy. This requires 30 per cent of the overall housing provision at Lodge Hill to be affordable, subject to a number of considerations including viability.
- 2.10 Affordable housing should be provided in all phases of the development. The exact location and spread will be determined through negotiation with the Local Planning Authority and the Council's Housing team.
- 2.11 There may be some cases where varying the 30 per cent provision for an individual development parcel would benefit the overall development. The Council will consider requests for this but only where a robust justification can be provided. The overall level of provision will have to be balanced elsewhere, preferably within the site. The Council will need to be assured that a suitable method for ensuring this is in place before agreeing to a variation, particularly where it requires the agreement of a different developer.
- 2.12 Delivery of the affordable units should be phased broadly in line with delivery of the private dwellings.

C3 ➔ 30% of housing at Lodge Hill should be provided as affordable housing, in line with Policies CS14 and CS33 of the Core Strategy.

- 2.13 Medway Council has established standards for the size and tenure mix of affordable housing provision. These relate to the existing distribution of need in the main urban area. Lodge Hill is a completely different context. It would not be appropriate to apply the same standards and a different way of assessing the likely housing need at Lodge Hill is needed.
- 2.14 Some work on this has been carried out in support of the Core Strategy. In terms of size of unit, the housing need is wide-ranging. The affordable housing should be representative of the mix within each phase. The mix of tenures is also important to meet housing needs and to create a balanced community. A lettings plan for the affordable housing will need to be agreed with the council, which will help with this.
- 2.15 Social rented housing has been the main form of affordable housing provision for some time but is now being phased out in favour of affordable rented. The legislation that enables this new form of tenure should be in place by the time housing starts being delivered on Lodge Hill. It is also possible to incorporate key principles of the affordable rent tenure under current legislation. Affordable rent will therefore be sought on the Lodge Hill development from the outset.

2.16 Intermediate tenures include shared ownership, shared equity and intermediate rent. They should be a key part of the housing provision at Lodge Hill. This will ensure that a mixed and inclusive community can be created. Shared ownership is the council's preferred form of intermediate housing. There is evidence of strong demand for it within Medway. However, others will be considered, particularly where economic circumstances may influence the viability of a particular type. The intermediate market is evolving rapidly, and the council does not wish to prevent any future products being considered.

C4 ➔ The affordable housing provided at Lodge Hill should provide a good range of sizes of units to reflect the overall housing mix for the site. It should be based on a tenure mix of 50 per cent affordable rented and 50 per cent intermediate housing, though some variation on a phase-by-phase basis may be acceptable.

2.17 The existing community at Chattenden has a high proportion of affordable housing. This is mainly concentrated in an area to the north of the main village, owned and managed by London and Quadrant (L&Q). Its isolation from the main village is unhelpful for community cohesion.

2.18 A high proportion of a single type of housing in one area can undermine the benefits of having a mixed and inclusive community. This is not a reason to reduce the level of affordable housing in neighbouring phases. Instead, the tenure and siting of new provision should be carefully

considered. The council will work with developers to agree an affordable housing plan for each phase, taking into account adjoining development. This applies whether it adjoins the existing village or other phases of Lodge Hill.

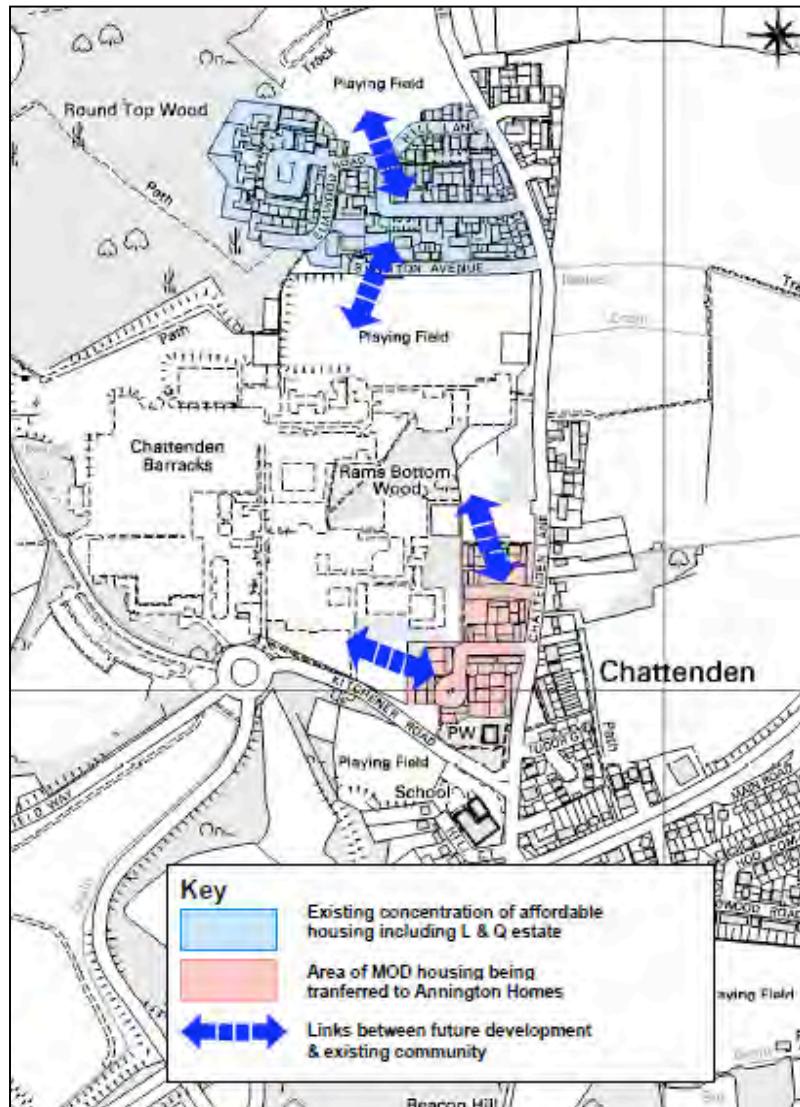


Figure 2.1: Interface with existing housing at Chattenden

- 2.19 As the MOD vacates the site, it is also releasing its family housing in Chattenden to Annington Homes. Many of these properties are also in need of investment, although some have already been updated and sold.
- 2.20 Lodge Hill may act as a catalyst to nearby landowners and prompt investment in these (or other) areas. This would be welcomed, as it could help to improve the integration between the new and existing communities. The Lodge Hill developer and surrounding landowners are encouraged to explore a joint approach to any proposals that come forward. However, proposals for replacement of existing affordable housing cannot be offset against the Core Strategy's 30 per cent requirement. This figure should be a net increase in provision.
- 2.21 To be a fully inclusive community Lodge Hill will also need to make provision for specialist housing. This includes:
- sheltered housing for older people (sometimes also referred to as retirement villages);
 - assisted living or extra care, for older people with healthcare or personal support needs;
 - nursing homes, for older people with the greatest level of healthcare and personal support needs;
 - supported housing for people with physical and/or learning difficulties;
 - wheelchair accessible housing.
- 2.22 The exact level of these types of specialist provision will be determined through the outline planning application. Older peoples' housing provision should include both affordable and market housing.

C5 ➔ The development should make provision for specialist housing of the types set out above. The exact level of this provision, the timing and the proportion that should be affordable will be determined with regard to identified needs.

Community Facilities

- 2.23 The development at Lodge Hill could lead to as many as 12,500 new people living in the area. There will also be a workforce of around 5,000 people, some of who will travel in from outside the new settlement. This amount of population growth will clearly increase demand for supporting facilities. However, it will also be able to support a range of services and facilities that can serve the Peninsula as a whole. There is an opportunity to ensure that provision on the Peninsula better meets the needs and aspirations of the new and existing communities. The developer should work with the council and the existing community to identify how best to realise this opportunity.
- 2.24 The developer must be responsible for meeting the needs arising from Lodge Hill for a number of reasons:
- To ensure that Lodge Hill becomes a well-functioning and liveable new community, with a sense of place and a good quality of life for future residents.
 - To ensure that further strain is not placed on existing communities and facilities. Many existing facilities are already under pressure and could not cope with the increased demand.

- To reduce the need for people to travel to meet their day-to-day needs. Vehicular travel has both environmental impacts through increased emissions and social impacts through congestion, noise and air quality.

C6 ➔ Demand for community facilities and services arising from the increase in population at Lodge Hill will be met within the development site wherever possible. Demand can be met off-site but nearby where this is a more efficient use of resources or has additional benefits for existing communities. In this case, excellent links from the development must be provided. Off-site provision further afield will be acceptable where the scale or nature of the demand cannot be met on or near the site.

- 2.25 Table 2.1, overleaf, sets out the broad scale of community facility provision that the development is likely to require. The final demand will depend on the exact housing numbers and mix that come forward. The phasing and triggers for provision will be agreed at outline planning application stage.
- 2.26 The design and layout of the development overall should also contribute to community functioning, including providing meeting and gathering places, preventing isolation of any particular section of the community and incorporating Safer by Design principles in the design of individual parcels.
- 2.27 Off-site provision may be beneficial for leisure and indoor sports. There are existing facilities close to the site, which are well used and valued. Investment here to cater for some of the increased demand is likely to be a more efficient use of resources than providing brand new facilities within the development. It will also promote integration of the new and existing communities.
- 2.28 Deangate Ridge sports centre, adjacent to the eastern site boundary, is an obvious opportunity for off-site provision. There are also facilities within and on the edge of Hoo, including a swimming pool and the BAE sports and social club. The BAE club is privately owned but is used by various community groups. The owners have recently been seeking to improve its facilities, so it may be another option to meet some demand from Lodge Hill. Public access and use of the facility would have to be assured. Its location at the northern edge of Hoo could act as a bridge between the two settlements, especially if good links are provided.
- 2.29 There is also an existing community centre at Chattenden, located at the edge of the L&Q estate. This is well used by local groups, some of which also cater for other communities on the Peninsula. It is well positioned to serve the Chattenden end of Lodge Hill, but in need of investment. Relatively small cost improvements could make a significant difference to the functioning of this valuable facility. For example, a link between the two existing buildings to provide a reception and lobby, and some external improvements, would make it a much more welcoming place.

Facility	Amount
Secondary school and sixth form	1 school – five to eight forms of entry (150 – 240 places per school year) plus arrangements for interim provision if this phased later in the development programme
Primary schools	Two new schools and one expansion/rebuild – five to eight forms of entry in total (150 – 240 places per school year)
Nursery education (ages 2-4-years-old)	80 – 100 places to be provided, preferably co-located with primary schools
Other childcare/education provision	At least one families and children's services centre (Sure Start or future equivalent)
Healthcare	Special Educational Needs provision to be incorporated into school provision
Public toilets	Health centre on site with accommodation for six - nine GPs plus ancillary services
Play areas	To be provided in Lodge Hill town centre and at the Chatterden local hub. Town centre facility to include Changing Places facility in addition to standard disabled toilet
Informal amenity space	NEAPS – as per adopted standards*
Formal outdoor sports	LAPs/doorstep play – as per adopted standards*
Formal indoor sports	LEAPS – as per adopted standards*
Allotments	As per adopted standards*
Youth centre(s)	As per adopted standards*
Community centre(s)	As per adopted standards*
Place of worship	0.18 hectares per 1,000 population
Library	Likely one standalone facility plus sharing of main community hub
Recycling bring sites	Likely one centre in multi-use building in main valley, plus expansion/improvement of existing facility in Chatterden
Cemetery provision	Capacity to share community facility in main valley
Emergency services	Library to be combined with other community facilities
Community safety	At least two (one in town centre and one at Chatterden hub)
	Likely to constitute a contribution towards off-site provision
	Capacity for police contact point in shared community facility
	Possible ambulance base
	Provision within shared community facility e.g. contact point and or base room for community wardens

Table 2.1: Suggested scope of community facilities required by Lodge Hill

*The Council is in the process of reviewing its open space standards and this is due to complete by the end of 2011. Lodge Hill will be expected to make provision in line with the latest available figures at the time of any outline planning application.

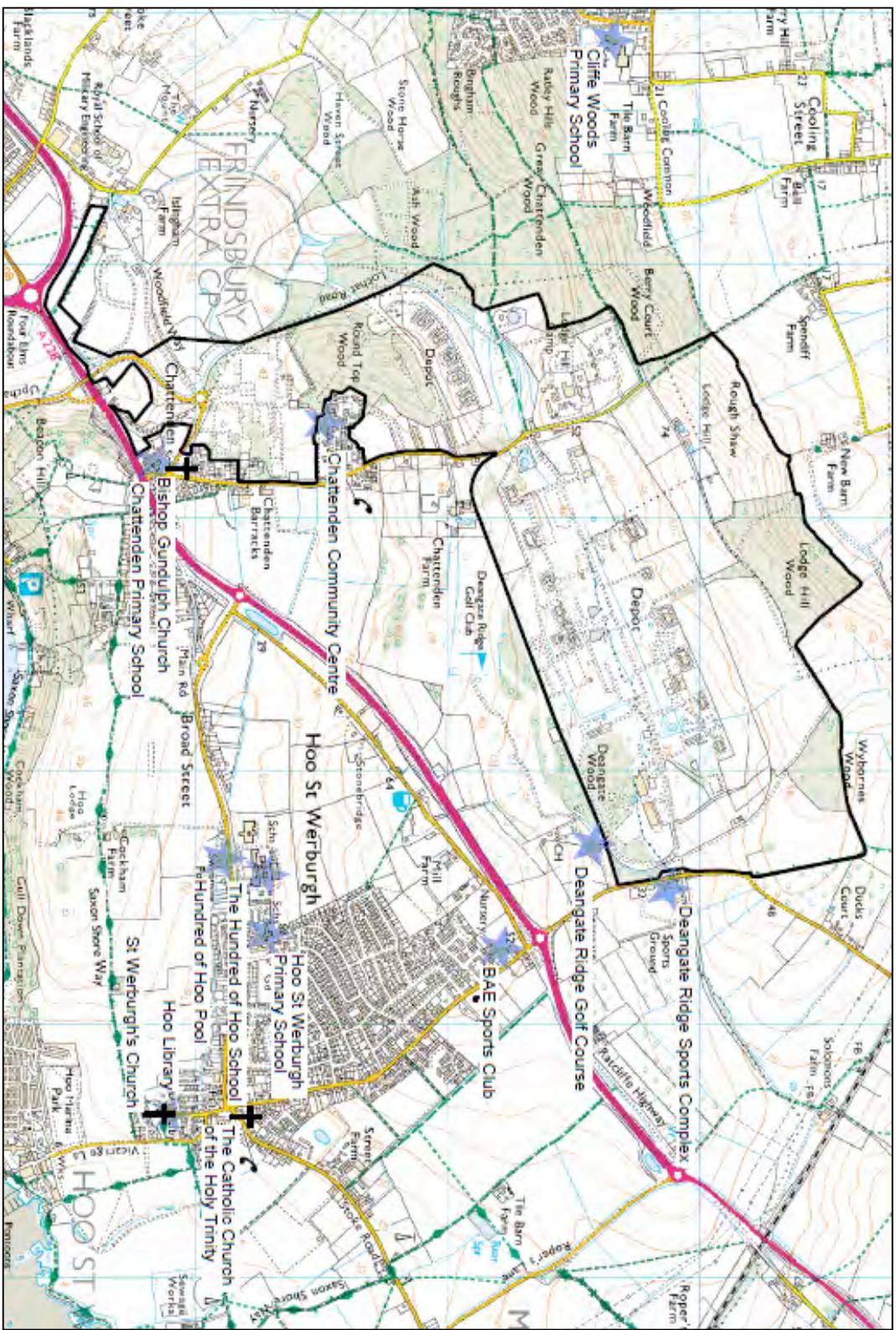


Figure 2.2: Existing community facilities near to the site

- 2.30 Clustering of community facilities has many benefits. Where different groups use a building at the same time, it can help to bring together different sections of the community, for example with a community café in the lobby of a shared building. Clustering facilities also makes them easier to get to, for residents who may want to use more than one service, for example. If located close to other uses, the potential for linked trips increases and they can help build the critical mass that creates a vibrant and liveable place.
- 2.31 Multi-functional buildings also reduce costs for community groups, as utilities, maintenance, insurance and so on are shared. Many community uses do not require specialist space, but simply somewhere warm, of good size, with toilets and a place to get refreshments. It also limits the natural resources used and avoids buildings sitting empty when their main user does not need them. Even uses that do require some specialist accommodation, like a library, can benefit from being located in a shared building.
- 2.32 Lodge Hill town centre is the obvious place for the main cluster of community uses. Most uses with a settlement-wide (or Peninsula) catchment should be located here. Examples might be a health centre, library, or place of worship.
- 2.33 Smaller hubs should be created so that as many residents as possible are within ten minutes walk of facilities. Two local hubs are likely to be needed in the main valley. Community uses with a smaller catchment should be located in these hubs. This will also support local retail provision by attracting footfall. These hubs should include green uses such as play space or allotments.
- 2.34 A five to ten-minute walking catchment is also appropriate for primary schools, so these should be located at the local hubs. Consultation has shown strong support for schools being at the heart of the new community. Out-of-hours use of their facilities (including sports provision e.g. playing fields) is likely to be the best way of achieving multi-functional provision at the scale of local hubs.
- 2.35 The topography and landscape of the site separate Chattenden from the main valley. Although it is still walkable, it is at further distance to the main town centre and people living here are more likely to consider using their cars to access its facilities. There are also a number of existing community facilities in Chattenden. It will need a local hub to meet the requirement for walking catchments and for the reasons above, this should be larger than the local hubs in the valley. It would serve the existing village as well as the new development.
- 2.36 There is therefore a clear hierarchy of local centres within the development:

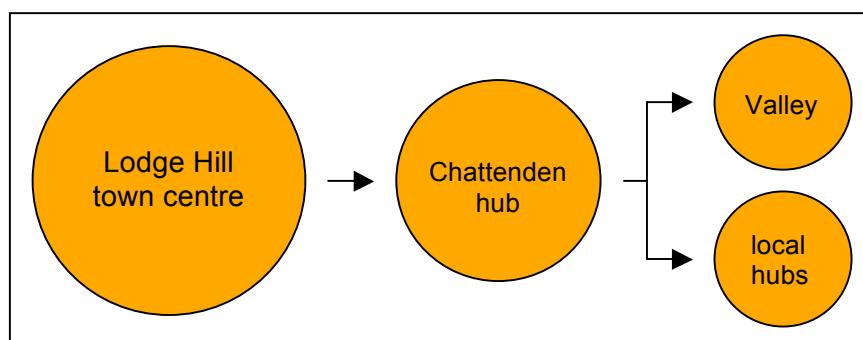


Figure 2.3: Hierarchy of local centres

2.37 The location of the hub at Chattenden should take advantage of the existing community uses to help build critical mass. There could be significant benefits to relocating some of these existing uses (such as the school, church or community centre) within the development to achieve this. In the case of the primary school, this is likely to need expansion to serve the new development in any case, so its relocation may be particularly beneficial. It would also prevent the existing community and the development around Chattenden from being perceived as a poor relation to the new provision in the main valley. This was a concern that was raised during consultation.

2.38 The developer is therefore encouraged consider opportunities for incorporating existing facilities within the development. This would, however, be dependent on agreement being reached with the relevant landowners and/or users.

C7 ➔ Community facilities within the site should be provided in multi-functional shared buildings wherever possible. The facilities should be clustered at the town centre and local hubs together with local green space. The exact distribution of provision between the hubs should be guided by:

- the hub's place in the hierarchy set out in Figure 2.3;
- whether the facilities proposed have a neighbourhood or settlement (or wider) catchment;
- the functional and social benefits of co-locating the specific uses proposed.

2.39 Some community provision, such as play space, has a very local catchment. These uses should be spread throughout the development. The council is in the process of setting access standards for open space in new developments. These specify the maximum distance that a resident should have to walk to each type of open space. In some parts of Lodge Hill ecology or heritage features may influence the available space for open space provision. This may mean the access standards have to be relaxed for some properties. However, this will only apply in exceptional circumstances and proposals should come as close to meeting the standards as possible.

2.40 Open space provision can also be multifunctional. Co-location of facilities such as play areas and allotments can help with security, community cohesion and management.

C8 ➔ Open space provision (including play space, formal outdoor sports provision, informal amenity space and allotments) should be distributed throughout the development in accordance with the council's adopted standards. Facilities with a wider catchment can be provided by contributions towards off-site provision nearby, if this has greater benefits than on-site provision. Open space provision should be multi-functional wherever possible.

Governance and management

2.41 Community facilities and services, open spaces and infrastructure all require ongoing maintenance, management and investment. Service charges are often set for new estates to pay for things like landscape maintenance. Usually, a private management company is employed to undertake the maintenance. However, this does not encourage a community to get involved in its local area

or to take responsibility for itself. It also does not allow the community to set priorities for future investment.

- 2.42 Given the importance of sustainability within the vision for Lodge Hill, the principles for the site emphasise the need for community development to be considered. Local people should be able to decide what their own issues, needs and solutions are.
- 2.43 The standard approach of providing estate management functions through a private company will not be sufficient for this vision to be realised. Whatever model is put forward must meet the following key principles:
- Enable ongoing investment in facilities and services, not just management and maintenance.
 - Be accountable to the local community, including representation from other local groups and bodies where appropriate.
 - Be able to respond to the local community's priorities and needs.
 - Encourage integration of the new community and the existing community of Chattenden.
 - Be able to have a holistic view of the needs of all facilities and services, including being able to work with other providers.
 - Be self-sustaining in terms of both funding and functioning. This may not apply from the outset, but should be possible once the development becomes established.
- 2.44 One option could be to establish a Community Trust or similar. This type of organisation can take on a wide range of responsibilities. It would enable residents to be directly involved in their neighbourhood. It is also able to be entrepreneurial much more easily than other forms of governance such as a parish council, meaning that it can take risks to achieve greater community gains.
- C9 ➔ A mechanism for ongoing community management and governance should be established. A Community Trust is the council's preferred option but other models will be considered if they meet the principles in para. 2.45.**
- 2.45 Whatever model is chosen (for the rest of this document referred to as a Trust) it must be able to fund its responsibilities. Some community facilities can be significant financial liabilities, although as noted above the sharing of facilities can reduce this. Service charges are a reliable option. However, they are unlikely to be set much above the level required for ongoing maintenance. This would not provide capability for ongoing investment or allow the Trust to respond to needs and priorities that arise as the community establishes.
- 2.46 Some of the facilities and services that might be passed to a Trust do have potential to generate income. It is also common for Trusts to be given an endowment when set up. This can be a financial endowment or in the form of land or buildings. Table 2.2 suggests various responsibilities that a Trust could take on, and which might provide an income stream.
- 2.47 The developer will need to have thoroughly costed the proposal for the governance organisation that comes forward. It will need to demonstrate how funding will be made available to meet the Trust's objectives.

Possible responsibility	Potential income
Management and maintenance of open spaces	N
Fishing lakes	Y
Management and maintenance of ecology areas	N
Management and maintenance of unadopted roads	N
Managed workspace provision	Y
Parking provision (communal/charged)	Y
Car club	Y
Community centres	N
Sustainability advice	N
Partner/shareholder in any ESCo or MUSCo*	Y
Youth centre/provision	N
Waste management facilities/recycling & reuse centres	Y
Ongoing community engagement	N
Café and/or crèche associated with other community facilities	Y
Landmark projects (e.g. equestrian centre, garden centre/farm shop)	Y
Town centre management	Y

Table 2.2: Possible responsibilities for a Community Trust or similar

**An ESCo (Energy Services Company) may be set up to manage and distribute on-site energy generation. If it had responsibility for other utilities (such as sewerage or broadband) it would be a MUSCo (Multi-Utility Services Company).*

- 2.48 The Trust should be able to determine its own remit, to make sure it is truly representative of its community. However, many site management responsibilities are not optional; they have to be carried out as part of the developer's requirement to provide facilities to support the new development. While some of these can be usefully allocated to the Trust, it should still be given scope to expand or detail its role as the community establishes.
- 2.49 It may be most practical to establish the Trust in phases. If so, its funding (in whatever form) must keep pace with its responsibilities. Early provision is preferable. Experience elsewhere suggests that Trusts have been most successful when set up before development has got seriously underway.
- 2.50 Whatever form of community organisation is provided, there will remain a role for parish councils in representing the existing and growing communities. The Trust should be prepared to work closely with existing parish councils and there may be parish council representation on its board. At present the site is covered by five different parishes (though the bulk of the developable area falls within Hoo St Werburgh and High Halstow) and it may be that in due course a new parish will need to be set up for Lodge Hill.

Neighbouring communities

- 2.51 Lodge Hill may, over time, replace Hoo St Werburgh as the rural service centre for the Peninsula. While it is not intended to deliberately over-provide services to encourage this, the larger population of Lodge Hill will support a greater range of services than are currently available on the Peninsula. Examples could be a foodstore, a wider range of health services and significantly improved leisure facilities. This should provide benefits for existing communities and the

potential catchment from neighbouring villages may increase the viability of some services, such as a high frequency bus service.

- 2.52 It is therefore important that nearby communities are able to access facilities provided on site. High Halstow, Cliffe Woods and Hoo St Werburgh are all within walking and cycling distance. Residents of other villages on the Peninsula currently have to drive (or catch an infrequent bus) to Hoo or the main urban area to access most services. They pass Lodge Hill en route, so may also divert into the site. Chapter 5 (Transport) discusses in more detail the form these links might take.
- 2.53 Although an increase in the facilities available to the Peninsula residents is generally supported, there is a possibility that new facilities at Lodge Hill could draw trade from existing facilities. This might even lead to the loss of some facilities where they are already struggling. This concern has been raised by a number of local residents and organisations during consultation events. Feedback from local residents on this issue shows that the facilities which raised most concerns were (listed with highest concern first):
 - Village shops.
 - Schools in neighbouring villages.
 - Village halls and community centres.
 - Village pubs.
 - Leisure facilities.
- 2.54 Facilities that have a catchment wider than Lodge Hill should be considered carefully. The opportunity to improve service provision for the Peninsula should be taken. However, where possible, these facilities should complement the existing offer rather than directly competing. For example, there may be no need to provide a swimming pool immediately next to the site, particularly if links to the existing pool in Hoo can be improved.
- 2.55 In other cases, the solution may be working arrangements that include the existing communities and businesses. Any town centre management or business forum for Lodge Hill could invite businesses in Hoo to join. A close relationship between the new secondary school and the Hundred of Hoo School would help to balance demand between them. A different specialism for the new school and joint working on intake arrangements could also help to reduce conflicts.
- 2.56 Finally, the potential for direct support to existing facilities should be considered. It is not the role of a developer to support unviable businesses elsewhere or at the expense of the new provision. However, where Lodge Hill has a direct impact on an existing service and its failure would have a harmful impact on neighbouring communities, there is a case for targeted investment (financial or otherwise) to help mitigate the impact.
- 2.57 This is only possible through the planning process if the contribution required meets strict legal tests regarding its relevance to planning and to the particular development. Planning applications (outline and detailed) for services and facilities at Lodge Hill will be expected to demonstrate their likely impact on existing services so that any need for mitigation can be effectively judged.

C10 → Proposals for facilities and service on Lodge Hill should seek to minimise negative impacts on existing communities and facilities in nearby villages. Measures to reduce impacts should be incorporated into proposals, including as part of future governance arrangements.

- 2.58 Many developers of large-scale projects also have corporate social responsibility initiatives. This might include a fund that encouraged bids for community projects in nearby villages. This is beyond the scope of the planning process.

3

Chapter three **Economy**

Economic strategy

3.1 The Core Strategy says that Lodge Hill should make a strong contribution to the wider Medway economy. It will need to have a strong and sustainable economic base in its own right. Lodge Hill has some major advantages as a location for modern, high-quality employment uses (see Box 3.1). Establishing a successful business location will take commitment and investment from developers. However, with a 15-20-year timescale for the development, it is entirely achievable.

- Excellent transport links to London and Europe via the High Speed 1 rail link
- Good road links (M2 and M25 via the A289)
- Potential for direct energy supply from on-site generation and nearby power stations (needed for some energy-hungry IT uses such as data centres)
- Located within North Kent's corridor of innovation centres and networks
- Exceptional rural setting including golf course adjoining the site
- Bridging location between emerging industries at Grain and Kingsnorth and the main urban area, including the universities at Chatham Maritime

Box 3.1 – Lodge Hill's advantages as a potential business location

- 3.2 Partnership working with prospective developers has already been taking place to identify the potential for employment at Lodge Hill and how this can best be fulfilled. The council is committed to continuing this. This includes work outside of the planning process, for example with the council's economic development and education teams.
- 3.3 The Council's Economic Development Strategy identifies some of the issues facing the local economy. It sets strategic priorities for Medway's future growth. Developers must have regard to this strategy when drawing up proposals for the site. Issues of particular relevance to Lodge Hill include:
- increase the gross value added (GVA) of employment within Medway;
 - reduce out-commuting;
 - maximise the potential of the M2-accessible areas where demand for premises is highest;
 - retain more graduates;
 - raise skills levels within Medway's workforce.
- 3.4 Developers should capitalise on Lodge Hill's advantages to make the most of opportunities in higher-value growth sectors. The sectors which may have most potential for Lodge Hill include:
- high-value manufacturing (including food);
 - environmental technologies;
 - research and development;
 - creative industries;
 - health.

- 3
- 3.5 Infrastructure is key to achieving economic growth. Lodge Hill can take advantage of its good transport links. Telecommunications (such as high speed broadband) is also becoming an absolute priority for businesses. The developer should make every effort to secure the best possible broadband infrastructure into the site.
 - 3.6 It is central to the vision for Lodge Hill that it should become a sustainable and successful business community, not just a commuter settlement. It should take advantage of fast links from (as well as to) London as well as generating opportunities for locally based employment. The developer must have a holistic strategy for realising Lodge Hill's economic potential.

E1 ➔ An economic strategy for the site should be submitted with the outline application.

Jobs and business space

- 3.7 The Core Strategy gives two targets for employment creation:
 - Around 5,000 jobs (in balance with housing numbers).
 - At least 43,000m² business floorspace (with an aspiration for a higher figure).
- 3.8 It is not realistic to expect everyone who lives on site to also work on site. However, it is important that the opportunity is provided. This will also allow for changes in working patterns in the future, where more people may choose to live and work in the same area. The rising cost of travel is one factor that could contribute to this.
- 3.9 Some jobs will be provided in the on-site retail, leisure and community facilities. Figure 3.1 shows the likely split of employment from on-site services. This is based on the Core Strategy evidence base, which

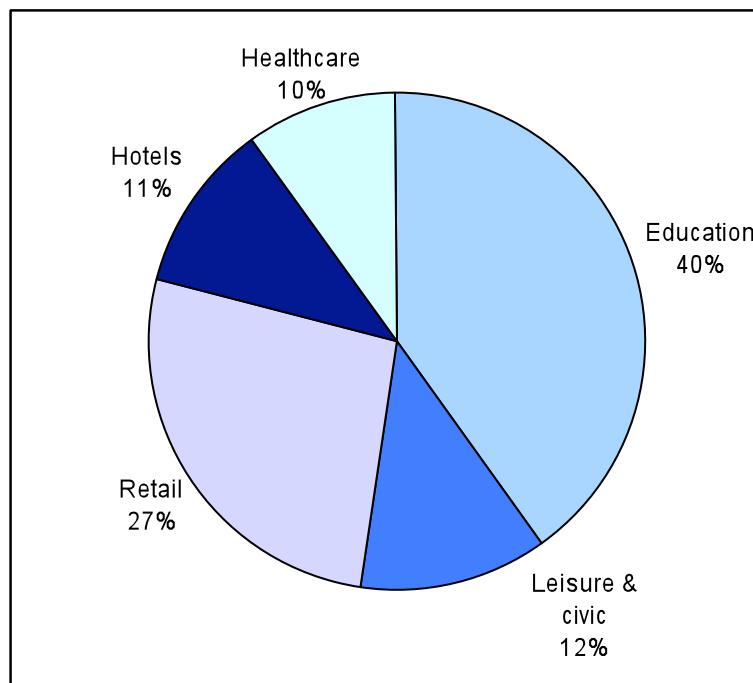


Figure 3.1: Indicative services employment distribution

identified the likely range of these facilities based on the needs generated by the community and the potential markets.

- 3.10 Jobs in these sectors are an important part of overall provision. However, they will not address many of the local economy's identified weaknesses. The target for business floorspace will ensure that the development also provides the higher-value employment that the local economy needs.
- 3.11 The total employment in on-site services will be around 900 jobs, leaving 4,100 to be provided by the business space. If the minimum floorspace is provided, this means around 1 job per 10m².
- 3.12 This is clearly ambitious. Guidance prepared in 2010 for the Homes and Communities Agency suggests very few sectors reach this average employment density. Office-type uses are the main sector that achieves it. Light industry and general industry have averages of one full-time equivalent (FTE) job per 47m² and per 36m² respectively. However, this can vary greatly (the HCA suggests a range from one job per 18m² to 60m²). Some light industrial uses (such as some research and development) have employment densities close to the target figure.
- 3.13 This highlights the importance of aiming to exceed the Core Strategy's floorspace target. It would give some flexibility regarding which uses and sectors can be accommodated within the site, while still allowing the overall jobs target to be met.

E2 ➔ Although 43,000m² is the minimum acceptable employment floorspace, the masterplan should retain the ability to accommodate a significantly higher level, should the demand be there. The developer's economic strategy will be expected to demonstrate how the level of floorspace proposed will meet the target of around one job per household.

- 3.14 High-value employment tends to fall within use class B1, and some within B2. These classes cover offices, research and development, and light industrial (B1) and general industrial (B2). Business floorspace at Lodge Hill should concentrate on these uses. Not all B2 uses will be suitable for the site, but modern technology means that many industrial uses can be accommodated in mixed-use areas.
- 3.15 Sui generis uses (uses not falling within a defined class) may also be appropriate. This will depend on the nature of individual proposals. Environmental technologies, one of the key growth sectors, often involve sui generis uses.
- 3.16 Uses within Class B8 (storage and distribution) often require large footprint buildings with excellent road access. They tend to generate large amounts of HGV traffic. Employment in these uses is often at a very low density, and can be low-skill and pay. These uses will not generally be appropriate at Lodge Hill. However, some small-scale B8 uses may be accepted as part of the overall mix. In this case, they would have to demonstrate that they do not undermine the overall vision and character of Lodge Hill.
- 3.17 There should also be some provision for uses that are intended to improve the functioning of the settlement, as well as those concentrating on raising

the area's economic profile. Uses such as a car mechanic, for example, will make Lodge Hill more liveable for residents. These can be termed non-core or functional uses.

- 3.18 The main considerations on whether any particular use is acceptable for the site will be:

- how well the proposal fits with the overall vision and character for the development;
- the amount of jobs created;
- the contribution of the proposed use towards the wider local economy, in terms of value added, skills development and/or graduate retention;
- Its value to the proper functioning of Lodge Hill as a place to live, or to the wider Peninsula.

E3 → The majority of business floorspace at Lodge Hill should be within use classes B1. The acceptability of use class B2 and sui generis uses will be assessed on a case-by-case basis. B8 uses will not generally be acceptable. Between 5 per cent and 10 per cent of overall floorspace should be reserved for non-core or functional uses (see para. 3.16).

- 3.19 The government is reviewing the use classes order. This could significantly change the grouping of business uses. In this case, the discussion and policies above should be taken to refer to the equivalent replacement use classes.

- 3.20 Employment space at Lodge Hill should be provided as an integral part of the settlement's built form. Large single-use areas should be avoided. Town and local centres should be mixed-use hubs including employment provision. Some employment uses can also be located within or alongside residential areas. The specific uses proposed would have to avoid impact on the amenity of neighbouring residents.

- 3.21 Some business park provision could accommodate larger floorplate uses and those that cause amenity problems if located too close to residential properties. It would also allow clustering of uses, which may be crucial to successfully establishing higher value employment.

E4 → Employment space should be distributed and integrated throughout the site. Any business parks must reflect the overall character of the development. Business uses should be provided in the town and local centres. Small clusters of business premises in predominantly residential areas will be acceptable where the uses proposed will not harm amenity.

- 3.22 A range of types and sizes of business premises should be provided. Smaller units are generally easier to integrate and have higher employment density. They are suitable for start-up and grow-on businesses, so a healthy supply can help raise graduate retention. Medway currently has much higher demand for small units than large units.
- 3.23 Large, single-user buildings are still acceptable. In the case of business parks or clusters at least one large user may be needed as an anchor tenant in a similar way to a department store anchoring a shopping centre.

However, large single-use buildings should not form the sole strategy for employment provision.

- 3.24 Managed workspace has a crucial role to play in increasing the supply of value-added jobs and nurturing local entrepreneurs. It has often been particularly successful for high-tech industries. It can include workshop/industrial space as well as offices, and can range from a single desk in a shared office to a suite suitable for a medium-sized business, as well as other services for homeworkers.

E5 ➔ Employment provision should include a substantial proportion of small and medium-sized business units as part of a wide range of types and sizes. Managed workspace (both office and industrial) should be also provided.

- 3.25 Business premises can become outdated very quickly. The physical constraints of a building built for a specific user can be an issue. Other common concerns relate to ICT requirements (especially broadband speeds) and the energy costs of running an older building. The developers of Lodge Hill will need to consider how their employment provision can be future-proofed so that it continues to thrive in the longer term.

E6 ➔ Proposals should ensure the provision of, and allow for future upgrade of, high-quality ICT infrastructure and flexible formats and layouts that will enable future adaptation and conversion.

- 3.26 Another current trend is an increase in working from home. Homeworking is not included in calculations of employment need and provision because it can be difficult to measure. In many cases the homeworker is employed by a company elsewhere but only travels to the office when necessary. However, with the right infrastructure, homeworking can include a very wide range of business models, and can provide high value-added employment. High-speed broadband will make Lodge Hill attractive to this type of worker.

E7 ➔ Provision and support for homeworking should be made as part of the proposals for Lodge Hill, including dedicated workspace in a high proportion of dwelling units (except specialist units such as older persons housing).

- 3.27 Live-work units are one form of homeworking. They fill a specific niche in the market. There is no evidence of any particularly high demand for them in Medway but they should be considered as part of the overall housing and employment mix at Lodge Hill.

- 3.28 Links to other employment provision within Medway are also crucial to help reduce out-commuting. Key destinations for those not working at Lodge Hill are Chatham town centre, Medway City Estate, Kingsnorth and Grain. The developer should consider improvements to these links as part of their wider transport and access strategy (see chapter 5 - Transport). However, this should not be considered an alternative to on-site provision.

- 3.29 The phasing of employment provision will need to be considered. It may take time to establish a market for large-scale employment provision at Lodge Hill. There will also be a need to respond to market changes. Ideally, employment provision should keep pace with residential development. This

should be adopted as a broad principle, but it is accepted that there will be some variation across the course of the development.

E8 ➔ Employment provision should broadly keep pace with residential development. The phasing should be agreed through the planning application process and variations from it thereafter should be justified.

Skills and education

3.30 The need to improve the skills profile of the local workforce is a key priority for Medway as a whole. The council has a range of initiatives aimed at improving the skills and employability of the local workforce. Many of these are promoted through links with local colleges and universities. The developers of Lodge Hill can both support and benefit from these existing initiatives.

E9 ➔ The economic strategy for Lodge Hill should consider opportunities for training and skill building, including through the construction process.

3.31 The greatest potential is at the construction stage. Support could include:

- financial support to existing programmes;
- provision of placements for apprentices and people on other training programmes;
- commitment to work with local contractors and a local supply chain;
- involvement of local firms and trainees in innovative construction methods and provision of small-scale renewables;
- work with colleges and universities to use the site as a case study.

3.32 At the operational stage, individual businesses that occupy new premises will be responsible for their own approaches to training. However, a wide range of business can benefit from initiatives linking employers with universities, business networks, potential employees or other support. The emerging economy at Lodge Hill could benefit from this kind of initiative.

Developer support could take the form of:

- financial support to existing initiatives and networks;
- facilitation of events for businesses moving into Lodge Hill (or considering doing so);
- provision of premises on-site that can be used by such initiatives;
- use of community premises such as schools to support lifetime learning and links between students and businesses.

3.33 Further discussion will be required on the exact approach that is most appropriate for Lodge Hill.

E10 ➔ Appropriate support for programmes designed to promote skill building in the local workforce, including businesses that locate on-site, shall be agreed between the developer and the council.

3.34 Most initiatives tend to be time-limited and in response to a specific need. However, the principle of working with the private sector and developers is unlikely to change. Any commitments for support will need to be able to respond to changing needs and to work through programmes that emerge over the development timescale.

- 3.35 The best way to promote links between on-site businesses and higher education would be for a university to locate on site. A satellite campus is the most realistic option given the amount of land available. The universities already in Medway have not identified any specific demand for a location at Lodge Hill. However, this may change over the 15-20 year development timescale. Other universities with a requirement in the area may also come forward. It is not appropriate to reserve an area in the masterplan for a higher education use. However, if a proposal comes forward at a later date, it will be looked on favourably.
- 3.36 Any higher education provision on site should be in addition to the employment floorspace identified above, except where the proposal includes specific employment-generating floorspace such as research facilities.

Retail

- 3.37 Figure 2.3 (Chapter 2 - Community) set out a hierarchy of centres within Lodge Hill. The same hierarchy should apply to retail provision, with large-scale uses and the main cluster being located at the town centre.
- 3.38 Hoo St Werburgh is the current rural service centre for the Peninsula. Although it has a wider range of facilities than the other villages, there is still limited retail provision. The two small foodstores in Hoo do not serve much more than a day-to-day convenience need. The range of other retail provision is also fairly limited. Much shopping from the Peninsula communities therefore takes place outside of the local area, in Strood or Gravesend for example.
- 3.39 This means that there is a wider market for retail facilities at Lodge Hill. Although the main purpose of provision at Lodge Hill is to meet its own demand (and so developers should not seek to over-provide retail facilities to draw from other centres), this wider market cannot be ignored and the location of the main town centre should reflect this and enable access for the rest of the Peninsula. It would also reduce the need to travel off the Peninsula for a proportion of shopping needs, creating a more sustainable relationship between the community and facilities. This wider market may allow retail facilities to be brought forward earlier than if they were relying solely on demand from the development. The access strategy for the site (see Chapter 5 - Transport) should acknowledge the likely draw of the town centre and provide good access to the town centre for sustainable modes of transport. The closest existing villages are within easy walking and cycling distance; this should be encouraged.

E11 ➔ Retail provision at Lodge Hill should follow the hierarchy of town centres and local hubs set out in Figure 2.3. The exact distribution between these hubs should ensure that the main town centre has sufficient critical mass to be a vibrant and attractive place for residents, workers and visitors.

- 3.40 The Core Strategy states that retail provision at Lodge Hill should be at least 5,000m² Gross External Area (GEA), including a foodstore. This figure is relatively flexible. There will need to be good a range of smaller shops, food and drink uses and other ancillary uses (such as a bank and a

hairdresser) to balance the draw of the foodstore. Links between the foodstore and the rest of the town centre are also crucial.

E12 ➔ A foodstore should be provided within or on the edge of the town centre. Excellent links between the two (physical and functional) should be provided. The scale of foodstore proposed (including its parking provision and the range of comparison goods sold) should avoid over-dominating the retail offer of the town centre as a whole.

- 3.41 As identified in Chapter 2, Lodge Hill may, over time, replace Hoo St Werburgh as the rural service centre for the Peninsula. The scale of retail provision proposed should take account of the possible impact on Hoo. A balance is needed between serving the needs of the new and existing communities and ensuring that some form of retail centre is able to survive in Hoo. The scale of foodstore proposed is likely to be crucial to this.

E13 ➔ The impact of retail proposals on nearby centres, particularly Hoo St Werburgh, should be considered and minimised as far as possible. The retail impact assessment to be submitted with the application will need to include an assessment of the impact on Hoo St Werburgh.

Leisure

- 3.42 Leisure provision is both a community facility and a contributor to the economy. Chapter 2 (Community) dealt with leisure requirements for the development arising from their role as a community facility. This section looks at the economic role. There is potential for additional provision that will support the wider business economy as well as providing more service sector employment. In particular, there is a market for hotel provision.
- 3.43 The Lodge Hill evidence base suggests that up to two hotels could be provided on site. A business hotel would serve both the on-site employment and the wider local economy. There is also a potential market for a leisure-based hotel. This could provide conferencing facilities and event space, high-end leisure facilities such as a spa, and a good quality restaurant.
- 3.44 There is an existing golf course adjacent to the site at Deangate Ridge. This has obvious synergies with a leisure hotel. Links between the two may also increase the hotel's ability to function as a support to the business offer on site. The council would be willing to explore opportunities for partnership working with the developer to maximise the potential support the golf course can offer.
- 3.45 Potential links to the golf course suggest that the best location for a leisure hotel is along the southern boundary of the current Lodge Hill training area. There are existing wooded areas, which would make a very attractive setting for a high-value hotel. This location is also close to the town centre and on the flatter part of the site that could accommodate larger floorspace business uses.
- 3.46 A business hotel is likely to need to be visible from the highway to capture trade related to the other employment areas on the Peninsula. There is very little of the site where this applies, which suggests that this hotel would be

better located in the Chattenden Barracks part of the site. Again, there are areas here that would be suitable for business use.

- 3.47 Smaller scale tourism use would also be acceptable. Less work has been carried out to determine the market for this at Lodge Hill. However, there are already a number of successful small-scale facilities on the Peninsula, and again there are potential links with off-site uses. For example, the RSPB have a number of sites nearby where they are considering expanding visitor facilities, and this could provide opportunities for eco-tourism.

E14 ➔ Proposals for tourism uses at Lodge Hill are likely to be acceptable, and should maximise potential synergies with off-site facilities. Small-scale facilities can be integrated with the overall development. Larger hotel facilities should ideally be co-located with areas of business use, but other locations will be considered where they complement the overall vision and masterplan for the site.

4

Chapter four **Environment**

- 4.1 Sustainability in its widest terms involves ensuring well-being and quality of life for everyone. This not only applies to current populations but also means ensuring that future generations have the same chances. Environmental issues, while not the only factor, are often central to this aspect.
- 4.2 All new development must be designed and built to minimise greenhouse gas emissions and resource use during the construction and use of the buildings. It will need to allow people to adapt to the consequences of climate change. The vision for Lodge Hill requires it to go beyond this general requirement and be an exemplar of sustainability. The Core Strategy makes particular reference to:
- enhancing the natural environment;
 - conserving natural resources;
 - minimising the carbon footprint of the development as a whole;
 - the potential for a comprehensive heating grid;
 - the need for a water strategy;
 - allowing people to lead sustainable lifestyles.
- 4.3 The scale of the site, and the fact that development is starting almost from scratch, means that Lodge Hill is a unique opportunity. It can set a standard not only for Medway, but also for the rest of the Kent Thames Gateway.
- 4.4 The policies in this chapter of the Development Brief set out what the council believes is necessary for Lodge Hill to be an exemplar of sustainability (in addition to the economic and social issues discussed in previous chapters). There is scope to relax individual standards if they cannot be met on a specific phase. However, a strong justification will be needed, in relation to the overall sustainability of the relevant phase and the site as a whole. This does not apply to those standards that deal with ecological impact, which must be dealt with on a consistent and site-wide basis.
- 4.5 To ensure that Lodge Hill as a whole is as sustainable as possible, it is essential that the site has a cohesive sustainability strategy. To ensure this, proposals should be assessed using BREEAM Communities.
- 4.6 BREEAM Communities targets the concept and planning stage of developments. It assesses eight categories that are linked to planning policy and best practice standards and are already familiar to developers. These are: Climate change and energy, community, place shaping, buildings, transport and movement, ecology, resources and business.
- 4.7 At the outline application stage, only an Interim BREEAM for Communities Certificate is available. This does not give a ranking, it only confirms whether the development will pass or fail. It is therefore not necessary for an interim certificate to be submitted for Lodge Hill, as the additional information it provides is so limited.

EN1 ➔ Outline planning applications must be supported by a sustainability statement showing how the requirements of this Development Brief will be met. This should demonstrate how the site will achieve BREEAM Communities “Excellent”. Detailed planning applications must be accompanied by:

- a sustainability statement showing how the requirements of this Development Brief have been addressed, including the CSH and BREEAM requirements for each building;

- A Final BREEAM Communities Assessment, demonstrating that BREEAM Communities “Excellent” has been achieved.

4.8 The Code for Sustainable Homes (CSH) and BREEAM are well recognised national rating systems for the sustainability of individual buildings. The government has adopted CSH for new homes, while BREEAM applies to all other types of developments. Both systems provide frameworks to reduce the environmental impact of new buildings through the integration of energy and water efficiency measures, climate change adaptation measures and by using less polluting materials.

EN2 ➔ All new buildings at Lodge Hill should achieve successively higher sustainability standards in accordance with the following timeline (these targets will apply at the time of the detailed planning application for each phase):

- Until 2016: CSH Level 5 and BREEAM “Excellent”
- From 2016 onwards: CSH Level 6 and BREEAM “Outstanding”.

Energy

4.9 Around half of the UK’s carbon emissions come from energy used in people’s homes and workplaces. It is therefore essential that the energy demand of the new buildings at Lodge Hill are minimised and that renewable energy resources are installed. Energy issues must be considered right at the start of the design process. Development at Lodge Hill should be designed in accordance with the energy hierarchy (see Figure 3.1).

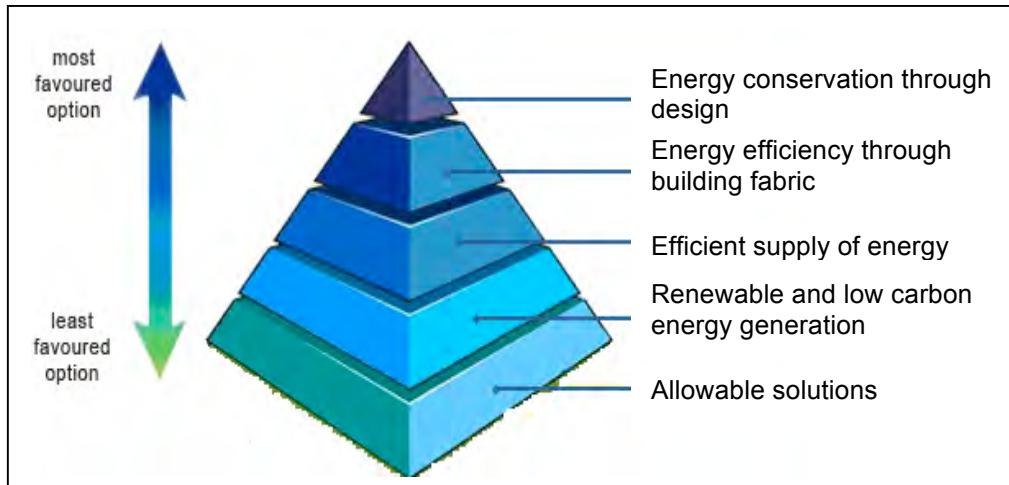


Figure 3.1: The energy hierarchy

4.10 CSH and BREEAM require a certain level of carbon reduction but do not specify a particular level of energy efficiency. To ensure Lodge Hill is constructed in line with the energy hierarchy, specific energy efficiency standards should also be set. The requirements of BREEAM “Excellent” are not as high as CSH Level 5. Energy costs are an increasing concern for businesses, so maximising energy efficiency in commercial buildings will help to increase the economic viability of Lodge Hill. Residential developments will need to meet the energy standards of the Code for Sustainable Homes Level required at the time.

EN3 ➔ Residential developments should meet the energy standards of the relevant CSH level. Non-residential developments should meet the energy standards required for BREEAM “Outstanding”.

- 4.11 CSH Level 6 requires dwellings to be zero carbon and this currently includes emissions from cooking and appliances. However, the current government has amended the definition of zero carbon to exclude appliances and cooking. In 2016 should the CSH Level 6 definition still include emissions from appliances and cooking, it will be acceptable to use allowable solutions to meet this part of the standard. Emissions from appliances and cooking do not need to be included in the energy strategy for on-site solutions.
- 4.12 Energy statements will be required at both outline and detailed planning application stages. These should include:
 - the expected energy demand and carbon emission from the development;
 - the expected energy and carbon dioxide emissions savings from proposed energy efficiency and renewable energy measures
- 4.13 Guidelines as to the format and required content of energy statements are included in Appendix 2.

EN4 ➔ All planning applications for new built development must be accompanied by an energy statement in accordance with the guidelines in Appendix 2.

- 4.14 Energy demand can be vastly reduced by passive design. Simply put, this means designing buildings to take maximum advantage of free heat from the sun and free ventilation and cooling from the wind. Box 4.1 suggests some principles that can be applied to achieve this.

- Designing the site layout and orientation of buildings to minimise the need for and use of mechanical ventilation, heating and cooling systems.
- Orientation habitable rooms (e.g. living rooms) within 30° of south.
- Locating windows at heights that allow lower sun angles in the winter.
- Providing louvres and balconies to provide shading to south facing windows in the summer months.
- Using soft landscaping including deciduous tree planting, to allow natural sunlight to pass through during the winter months while providing shade in the summer.
- Integrating passive ventilation, for example passive stack ventilation and design dual aspect units to cross ventilation.
- Providing north-facing windows in offices and other commercial buildings.
- Integrating exposed thermal mass into buildings to modulate internal temperature gains.
- Painting of flat roofs white or using green roofs to reduce heat absorption.

Box 4.1: Passive design measures

- 4.15 The Lodge Hill site has a number of topographical features that should be considered as part of a passive design strategy. These include the use of the south-facing ridge slope for solar gain and the need for additional shelter or careful orientation on the exposed ridge.

EN5 → All development at Lodge Hill should incorporate passive design measures that take advantage of natural light and heat from the sun and use natural ventilation, where possible, while preventing overheating in the summer. Measures should be tailored for each different building type and innovative solutions will be welcomed.

- 4.16 The energy efficiency standards proposed are in line with the Government's energy efficiency requirements for zero carbon homes in 2016. A national kWh/m² target for energy demand for non-residential buildings has not yet been published.

EN6 → All development at Lodge Hill should maximise energy efficiency as follows:

- All new residential buildings should achieve a heating and hot water demand of 39 kWh/m²/year for apartments and mid-terrace houses and 46 kWh/m²/year for end-terrace, semi-detached and detached houses.
- For non-residential development, as much as possible of the required 25 per cent reduction in carbon dioxide emissions compared to 2006 Building Regulations levels should be met through energy efficiency measures.
- External lighting should be designed to minimise wasted light through spillage or reflections to the night sky.

- 4.17 Decentralised energy generation is the use of an energy network to supply heat and/or power to a number of buildings from a local energy source. This can be a more efficient supply and lead to carbon dioxide savings, especially if waste heat from existing power generation or other local heat sources can be used. However, to maximise carbon dioxide savings the source and location of the energy must be selected carefully.

- 4.18 A certain threshold of heat demand is needed before a decentralised energy supply can become fully operational. There are a number of specific considerations when installing an energy network in a phased development:
- The very first buildings may need their own energy supply before the energy network is commissioned.
 - In order to obtain the necessary heat demand to operate the energy network, buildings that have a high heat demand (such as schools) should be brought forward as soon as possible.

- 4.19 If an energy network is planned at Lodge Hill planning conditions/obligations will be used to ensure that all buildings are connected. Should it be demonstrated that it would not be appropriate to connect a building to the network this will be considered on a case-by-case basis.

- 4.20 A decentralised energy generation network for Lodge Hill would also have potential to provide heat and power to existing buildings in close proximity to the site. The developers should make every effort to engage with the owners of these buildings and to connect them to the energy network. The existing buildings most likely to be suitable for connection include:

- Chattenden Community Centre;
 - Chattenden Primary School;
 - Deangate Ridge Leisure Centre;
 - Deangate Ridge Golf Club;
 - The London and Quadrant housing estate in Chattenden.
- 4.21 There are two potential sources of waste heat in the vicinity of Lodge Hill. These are the Damhead Creek and Kingsnorth power stations. Both have recently sought planning permission to extend or replace their capacity. Damhead Creek has planning permission, while Kingsnorth's planning application is still with the Secretary of State. Both include a requirement for pipes to be built to transport waste heat to the edge of their site boundary. If an energy network is proposed for Lodge Hill, all avenues for using the waste heat from one of these power stations should be explored. If it is not viable at the outset, or if the lead-in for this would unreasonably delay development, consideration should be given to designing the new development and heat network in a way that allows for connection to these existing heat sources at a later date.
- EN7 ➔ Any proposals for a decentralised energy system for Lodge Hill should:**
- be supplied by a renewable form of energy wherever possible;
 - include provision of an efficient gas or renewable fuel boiler system for temporary use in any buildings completed before the site-wide energy network is completed, and design these buildings so they can easily switch to the central energy network system once it is available;
 - ensure that, within each phase, buildings with high heat loads are brought forward as early as possible;
 - engage with existing local heat users (especially those listed above) to try and facilitate their connection to the energy network;
 - explore the feasibility of connection to existing heat sources and take this forward wherever possible and economically viable;
 - all buildings should be designed and built with a communal heating system (a system that has one central source of heat that is delivered to each individual home or commercial unit rather than separate boilers for each unit);
 - detailed planning applications should ensure that all buildings containing more than one unit have a communal plant room with space for: the boiler to supply the interim heat (if needed), the heat exchanger that delivers heat from the network, the heat meter and the controls, and which should be situated where there is easy access for the heat main to enter the building.
- 4.22 As much as possible of the energy demand remaining after passive design and energy efficiency are applied should be supplied from renewable sources produced on-site. This reduces the development's reliance on remote sources of energy, including imported oil and gas.
- 4.23 Different detailed proposals will be suited to different renewable and low carbon energy technologies. Site characteristics will also impact on their feasibility. The following renewable energy technologies are considered to be suitable for Lodge Hill:

- Small to medium-scale stand-alone wind turbines (subject to there being no undue negative effect on the sensitive landscape around the site and no significant noise implications for nearby residents).
 - Solar photovoltaics.
 - Woodfuel heating.
 - Solar water heating.
 - Ground-sourced and water-sourced heating systems (the electrical energy used to operate proposed heat pumps, and the carbon dioxide produced doing this, must be subtracted from calculations of energy provided and carbon dioxide saved by renewable sources of energy).
- 4.24 More innovative technologies that may come forward in the future will also be considered on a case-by-case basis.
- 4.25 Woodfuel heating can provide a low carbon, renewable form of energy. However, any wood fuelled installation should use fuel from a sustainable source, as local as possible, and should have long-term management arrangements in place. In addition, any installation would need to consider the potential air quality impacts from the combustion of woodfuel. This is particularly true at Lodge Hill as some of the ecological areas nearby may be sensitive to the effects of poor air quality. Liquid biofuels are not considered an appropriate energy source for Lodge Hill, as they should be prioritised for powering transportation.
- 4.26 No specific renewable energy target is set for Lodge Hill. The reduction in carbon emissions already required by the energy standards of the CSH and BREEAM levels, which cannot be met without renewable or low carbon energy provision.

EN8 ➔ The choice of renewable or low carbon energy supply should take into account the guidance in paras. 4.23 to 4.26.

- 4.27 In order to meet CSH Level 5 and beyond, the majority of the required carbon reduction can be met on-site through good design, energy efficiency and renewable energy technologies. However, it is likely that some remaining carbon dioxide emissions will need to be addressed through allowable solutions. These are off-site means of reducing carbon dioxide emissions. They have not yet been fully defined by the government but are likely to be measures such as installing renewable energy generating capacity off-site or retrofitting energy efficiency measures to existing local buildings.
- 4.28 The council's order of preference for the form of allowable solutions at Lodge Hill is listed below. However, this will be subject to compliance with the government's requirements for allowable solutions when these are published.

EN9 ➔ Medway Council has the following order of preference for allowable solutions:

1. Connection of buildings near to Lodge Hill to any planned heat network.
2. Installation of energy efficiency measures in local public buildings and homes.
3. Off-site renewable energy installations.

- 4.29 The water supply for Kent is already very stressed. Locally, many villages on the Hoo Peninsula are known to have water pressure problems. Water sources in the local area are likely to reduce further with the changing climate. Lodge Hill must not place additional stress on the water sources in the area.
- 4.30 Improvements to the water supply network are needed to take place to create sufficient capacity for the scale of development across the Kent Thames Gateway. Most of these will take place outside of the Medway area. The developers at Lodge Hill should work with the local water utility company to ensure that the development at Lodge Hill does not place additional stress on water resources.

EN10 ➔ Any outline planning application should be accompanied by a water-cycle strategy developed in conjunction with the council, the Environment Agency and Southern Water. This strategy should:

- assess the impact that the proposed development at Lodge Hill will have on water demand within the framework of the water companies water resource management plans;
- set out the proposed measures to limit additional water demand from new housing and non-domestic buildings. This should consider any energy used by water reduction methods and allow for ongoing safe maintenance of any technologies proposed.

- 4.31 Due to the existing local water supply issues, more stringent targets have been set for non-residential buildings than are required by BREEAM. This is not needed for dwellings because the mandatory water requirement for Code for Sustainable Homes Level 5 is the same as for Code Level 6.

EN11 ➔ All non-residential development at Lodge Hill should aim to achieve maximum credits from BREEAM credit area WAT 1. Landscaping should be designed to avoid the need for irrigation wherever possible.

- 4.32 Lodge Hill has a low risk of flooding from fluvial and tidal flooding, as classified by the Environment Agency. However, poorly designed or maintained drainage and too many hard surfaces in a new development can lead to localised surface water flooding in heavy rainfall. This can also increase the risk of flooding elsewhere.
- 4.33 BREEAM Communities sets a mandatory standard for surface water. The peak run-off rate into a watercourse or other receiving body must be no greater for the developed site than it was for the pre-developed site for at least the 1 in 100 year return period events. Run-off must be attenuated using sustainable urban drainage systems (SUDs) and not discharged into the sewer. Many of the important ecological areas on the Hoo Peninsula are water-based habitats. Changes to the drainage from Lodge Hill must avoid reducing the water supply for these sites.
- 4.34 The flood risk assessment process will identify whether any key flood flow paths exist on the site. If any key flood flow paths are identified, the design of the development should not position buildings within them unless suitable mitigation can be provided.
- EN12 ➔ The development should be designed and laid out to route water away from vulnerable uses if a flood were to occur. Should any key flood flow paths be identified on the site, buildings should be**

situated so as not to block these paths, unless this can be suitably mitigated.

- 4.35 SUDs are the most appropriate way of dealing with surface water run-off. They have a number of advantages over traditional drainage, including increasing biodiversity, removing pollutants from the water and improving the quality of green infrastructure. When designing SUDs:
- Where possible, water should be collected and stored on site for later use.
 - The next preference is for collecting water for slow release into a waterway (the preference is to store water in ponds or open water features, otherwise rainwater tanks or sealed water features should be used).
 - The next preference is to drain water directly into a watercourse. Where this is not possible, water should be directed into surface drains.
 - Water should not be directed straight into sewers.
- 4.36 Much of the ground at Lodge Hill is clay. This means that infiltration systems are unlikely to be appropriate.

EN13 ➔ Surface water should be managed onsite or as close as possible, using SUDs and taking into account the advice in para. 4.35. This should aim to provide water quality and biodiversity benefits as well as reducing the amount and rate of run-off. The impact on nearby protected ecology sites must be considered. A long-term plan for the maintenance and management of the SUDs will be required.

Materials

- 4.37 The energy used to create materials and in the construction process adds to a development's ecological and carbon footprints. Energy embodied in new construction and renovation each year accounts for about 10 per cent of UK energy consumption. Roughly half of this is used in the extraction and manufacture of materials. The rest is mainly from transport (to the processing plant or to site). Building materials have other potential impacts such as the emission of potent greenhouse gases from manufacture, and environmental degradation during extraction and processing. There is a finite amount of resources on the planet, so use of virgin materials should be minimised as far as possible.
- 4.38 Not all of the existing buildings on site are suitable for reuse in their existing form. However, as many as possible of the existing buildings on site should be reused where this does not prevent other objectives from being met. See also the Heritage section of Chapter 6.

EN14 ➔ A pre-demolition audit should be carried out prior to demolition for the whole site in line with the Institute of Civil Engineers' Demolition Protocol. Where this demonstrates that reuse of a building is not possible, an appraisal of the potential to reuse and recycle the materials on-site should be made using the same protocol. Consideration should also be given to temporary use of buildings that cannot be retained permanently.

- 4.39 The impact on the environment from materials used in the construction of Lodge Hill should be reduced as much as possible. Key considerations are:

- the embodied energy of the materials: reused and recycled materials mostly have a lower embodied energy than virgin materials;
 - the energy used to transport materials: materials should be sourced as locally as possible to the site (this is defined as within a 50 mile radius of the site);
 - the long term sustainability of the material: Whether it is from a replenishable source;
 - whether good environmental practices have been employed during extraction and processing;
 - whether the materials are free from substances which contribute to climate change through ozone depletion;
 - The durability of the materials, reducing the amount of materials needed to maintain the building over its lifetime.
- 4.40 The use of materials with a low environmental impact is not given significant weight in the scoring of the Code for Sustainable Homes or BREEAM. To meet the exemplar vision, additional requirements have therefore been set out in this Development Brief.

- 40 per cent (by volume) of construction materials should be sourced within 50 miles of the site.
- 30 per cent (by mass) of construction materials should be recycled or reused.
- All materials should be responsibly sourced. New timber should be PEFC certified or FSC, CSA or SFI certified with a Chain of Custody Certificate. Other materials should be certified using the BRE's BES 6001 Responsible Sourcing of Construction Products scheme.
- Building materials should be long lasting, taking into account their use and the conditions they will be exposed to.
- Residential developments should achieve an A+ to B rating from the BRE Green Guide to Material Specification (or equivalent replacement guide) on at least three of the following: Roof, external walls, internal walls (including separating walls), upper and ground floors (including separating floors, and windows).
- Non-residential developments should achieve an A+ to B rating from the above guide on at least three of the following: Roof, external walls, internal walls, upper floor slabs, floor finishes/coverings, and windows.

Box 4.2: Standards for materials at Lodge Hill

EN15 ➔ To reduce the environmental impact of materials and construction, Lodge Hill should aim to meet the targets and standards set out in Box 4.2.

- 4.41 Minimising the need for additional building work in the future can also reduce the impact of construction. Flexible, adaptable floor layouts and structures mean that buildings can adapt to future needs without major additional works.

Food

- 4.42 Around a quarter of an individual's environmental footprint comes from food. This can be reduced by eating more local, seasonal and organic food. Lodge

Hill should maximise the potential to assist residents to grow their own food, and to source more from local and seasonal sources. The Hoo Peninsula has a significant number of agricultural businesses, making local sourcing particularly appropriate.

- 4.43 When residents understand the benefits of local food, they are more likely to source more fresh food locally. This has many benefits, making residents healthier, reducing food miles and stimulating the local economy. Local food production does not feature in the CSH or BREEAM. However, as it has a large environmental impact, some measures to increase local food production have been included in this Development Brief.

EN16 ➔ 0.25 hectares of land per 1,000 population at Lodge Hill should be allocated for food growing. Provision should be made for the long term management of these areas. Specific provision of 1m² per household should be made for blocks of flats. This should be provided within 200m from the entrance to the building, where this would not unduly conflict with other necessary objectives for the development.

- 4.44 The quality of allotment provision (or similar) is crucial. This is to encourage a wider range of people to make use of them as well as maximising food growing potential. The council has set quality standards for allotment provision across Medway. These reflect the need to improve existing provision as well as relating to new allotments. Lodge Hill should ensure that the highest possible quality is provided.

EN17 ➔ All new allotment provision should be of high quality. Traditional allotment sites should have a water supply, sheds on all plots and have well-drained and accessible paths. Other provision, such as community gardens, will be judged on the basis of individual proposals. All sites should be securely fenced, capable of being locked and located where they can benefit from natural surveillance.

Waste

- 4.45 The construction sector uses over 420 million tonnes of material resources a year. It generates around 90 million tonnes of construction and demolition waste, three times the waste produced by all UK households combined. 13 million tonnes of construction materials are delivered to building sites but never used. It is essential that the design of the development and the management of the build programme consider how to minimise this waste at every stage.
- 4.46 All phases of Lodge Hill will be expected to:
- minimise the creation of waste in the first place (e.g. by using standard components and minimising any over-ordering or damage of materials);
 - reuse waste from the construction process;
 - allow as much waste as possible to be recycled on other nearby development sites (including but not limited to other phases of Lodge Hill).

EN18 ➔ A site waste management plan should be submitted to and agreed by the council before construction starts. During demolition and construction, waste should be reused according to the guidance in the Institute of Civil Engineer's Demolition Protocol. Where it cannot be

reused, it should be recycled according to the guidance in the same Protocol.

- 4.47 The site-wide waste management plan should include targets for waste recovery and measures to promote re-use, segregation, recycling and composting of waste. WRAP's Designing Out Waste and Net Waste tools or BRE's SMARTwaste tool (or agreed alternative) should be used.
- 4.48 High levels of recycling from residents and businesses at Lodge Hill should be encouraged. Recycling and composting facilities should be as easy to access as waste facilities. This means provision of space within buildings to store recyclables and easily accessible and secure outside space for storing rubbish and recycling. For residential units, the space inside the building should be integral to the kitchen design, not a stand-alone unit. The council produces guidance for developers on the specific requirements for storage space. Developers should refer to the most recent version.

EN19 ➔ Space should be provided inside all buildings for occupants to separate out waste into separate containers for the types of recyclables that the council collects. Space for composting organic waste should be provided in houses with private gardens. Enough space should be provided on-site to securely and safely store waste recycling and composting bins.

- 4.49 The council runs a household food waste collection service. However, there is currently no similar service for non-residential buildings. Specific composting facilities for non-residential buildings are therefore desirable.

EN20 ➔ A communal composting facility for businesses and/or community uses at Lodge Hill should be considered, along with provision for the long-term management of the facility.

Fostering sustainable lifestyles

- 4.50 In order to deliver a truly sustainable development it is necessary to work with residents to help them live a sustainable lifestyle. Sustainability advisors (green caretakers) are one option. They would be able to provide advice to residents about how to live more sustainably and how to make the best use of features within their properties and the development as a whole. The Community Trust (see Chapter 2) would be an ideal delivery method for the green caretakers. However, if this option is not taken, there should be an alternative provision.

EN21 ➔ A green caretaking service or alternative sustainability advice should be provided for incoming occupiers of properties at Lodge Hill.

Climate change adaptation

- 4.51 Climate change is likely to mean hotter drier summers and wetter milder winters with more intense rainfall. New development will need to be designed so that it remains comfortable for users over its lifetime. It should also avoid making local climatic conditions worse. Key issues to be considered include:
 - flood risk;
 - high temperatures (and resultant need for cooling);

- water supply and quality;
 - managing ground conditions.
- 4.52 Mitigating climate change can be difficult because it is impossible to know exactly what its effects may be. However, a lot of research has been done into the subject and there are best practice guidelines (as set out in Box 4.3) on how to accommodate it in new development.
- EN22 ➔ Applicants should demonstrate through their sustainability statement that the development has been designed to mitigate against the future impacts of climate change. This should include the measures in Box 4.3 where appropriate.**
- Orientate buildings and streets to minimise summer and maximise winter solar gain.
 - Maximise natural ventilation.
 - Incorporate green roofs and walls into buildings.
 - Provide amenity spaces that can be used for the enhancement of biodiversity, sustainable drainage systems and for ameliorating the urban heat island effect.
 - Be adaptable to allow for additional shading or cooling requirements as the climate changes.
 - Avoid large expanses of hard surfacing, such as car parks. Where large expanses of surfacing are proposed, this should be constructed from permeable paving in order to lessen the risk of flooding.
 - Use roof spaces where practicable to create new outdoor spaces and enhance biodiversity alongside the integration of renewable energy (where this does not conflict with the installation of solar technology).
 - Provide wildlife corridors to enable the migration and adaptation of species.
- Box 4.3: Best practice guidelines for mitigating against climate change
- ### Pollution and nuisance issues
- 4.53 There is known to be some land contamination on the site. Given the long history of military use, including manufacture of munitions, this is to be expected. It is not yet known exactly what this constitutes or where the highest concentrations are.
- 4.54 The developer will need to propose a remediation method following full survey results. Burying and capping of contaminated soils is not likely to be sufficient. Treatment of soil onsite and reuse within the development would be more sustainable than transporting large amounts off-site for treatment or disposal. This would be the council's preference, where the level and type of contamination allows. Final details will be dealt with through the outline permission and its conditions.
- 4.55 A phased approach to remediation may be acceptable. The developer would need to demonstrate that there would be no unacceptable risk to development or end users on the treated parts of the site from contamination remaining elsewhere.

4.56 The remediation strategy will also need to consider the risk to water quality, particularly in relation to any SUDs and the existing watercourse. There is unlikely to be major areas of groundwater onsite due to its geology. However, where small amounts of water have collected in made ground, there is a risk that these may also be contaminated.

EN23 ➔ A full contamination survey and initial site-wide remediation strategy should be submitted with the outline application. Detailed remediation proposals may be dealt with on a phased basis.

4.57 The development of Lodge Hill may cause some issues with noise and air quality. The main causes are likely to be:

- construction stage impacts;
- increased traffic;
- industrial/employment uses (although it is unlikely that proposals will involve heavy industry);
- deliveries for retail and other town centre uses, particularly a supermarket or other larger retail;
- energy generation plant(s);
- wastewater treatment plant(s);
- cooking smells and noise associated with food and drink uses.

4.58 Traffic-related impacts will need to be considered at the outline application stage. Some preliminary work was done for the Core Strategy evidence base. This suggests that the main area affected is likely to be Four Elms Hill, approaching Four Elms roundabout. There are a few isolated dwellings on this stretch of road. There may also be some impact around the main site accesses. The effect of this on existing residents and those moving into the new development must be considered.

4.59 Construction stage impacts will also need to be considered at outline application stage. These will need to be resolved before any form of development starts on site, including any remediation, infrastructure or earthworks. A construction management plan should be provided, either with the outline application or through conditions attached to it. In relation to noise and air quality, it is expected to include the following:

- Details of phasing and construction traffic routing.
- Dust suppression measures.
- Hours of working.
- Policies for control of noise from the site.

4.60 Other impacts, which relate to individual uses, will not be known until detailed proposals come forward. Air quality and noise assessments must be submitted with any detailed application for uses that would cause emissions or noise. These will be expected to comply with any site-wide strategy.

EN24 ➔ An air quality assessment and noise assessment should be submitted with the outline application. As well as assessing traffic and construction impacts in detail, this should highlight areas where further assessments will be needed at the detailed application stage(s). A construction management plan or code of practice should also be submitted before development starts to demonstrate how construction-stage impacts will be minimised.

- 4.61 Because traffic is expected to cause the most impacts, electric vehicles are one option to reduce this. Their main benefit relates to air quality, as they cause no emissions at the point of use. They can also reduce noise impact, and have sustainability benefits, especially over the long term. Hybrid vehicles are not completely emission-free but can still be a significant improvement on petrol or diesel engines.
- 4.62 Use of these (or other new technologies with similar benefits) should be considered for the Lodge Hill bus service and car club in particular (see Chapter 5). Charging points and other measures to encourage take-up of these vehicles by households and businesses should also be provided.

EN25 ➔ The use of electric, hybrid and other low-emission vehicles should be promoted as part of any air quality strategy for Lodge Hill. Readily available charging points for electric vehicles should be provided throughout the development.

Ecology

- 4.63 The Lodge Hill site is of considerable significance for ecology. Although in military use, there are areas within the security fence where this is fairly low intensity. A wide range of natural or semi-natural habitats therefore remain. In much of the area outside the security fence, the training activity takes place alongside agriculture. There are shelterbelts, hedgerows and blocks of woodland within this area.
- 4.64 The Chattenden Woods SSSI crosses the allocation boundary. Great Chattenden Wood lies mainly outside the boundary, at the north-western corner. Lodge Hill Wood and Rough Shaw, an area of grassland, are within the boundary, at the north edge of Chattenden Ridge. As an SSSI, this site is of national importance for ecology. It is designated for its woodland habitat and the range of woodland birds that it supports.
- 4.65 Initial surveys of the site were carried out as part of the evidence base for the Core Strategy. It has already been identified that the site supports a large number of species that are protected by UK or European legislation, or are priority species in the UK Biodiversity Action Plan:
- Reptiles (adder, grass snake, slow worm and common lizard).
 - Several species of bats (complete list not yet confirmed).
 - Badgers.
 - Great crested newts and common toad.
 - Birds* (barn owl, bullfinch, cuckoo, dunnock, linnet, hobby, nightjar, skylark, song thrush, starling, lapwing, fieldfare, brambling, redwing, turtle dove).
 - Invertebrates (cinnabar moth, wall brown, wasp spider, several bee species).
 - Plants (true fox sedge).

**This list refers only to species that are specifically protected. There is a general legal protection for all wild breeding birds and their nests.*

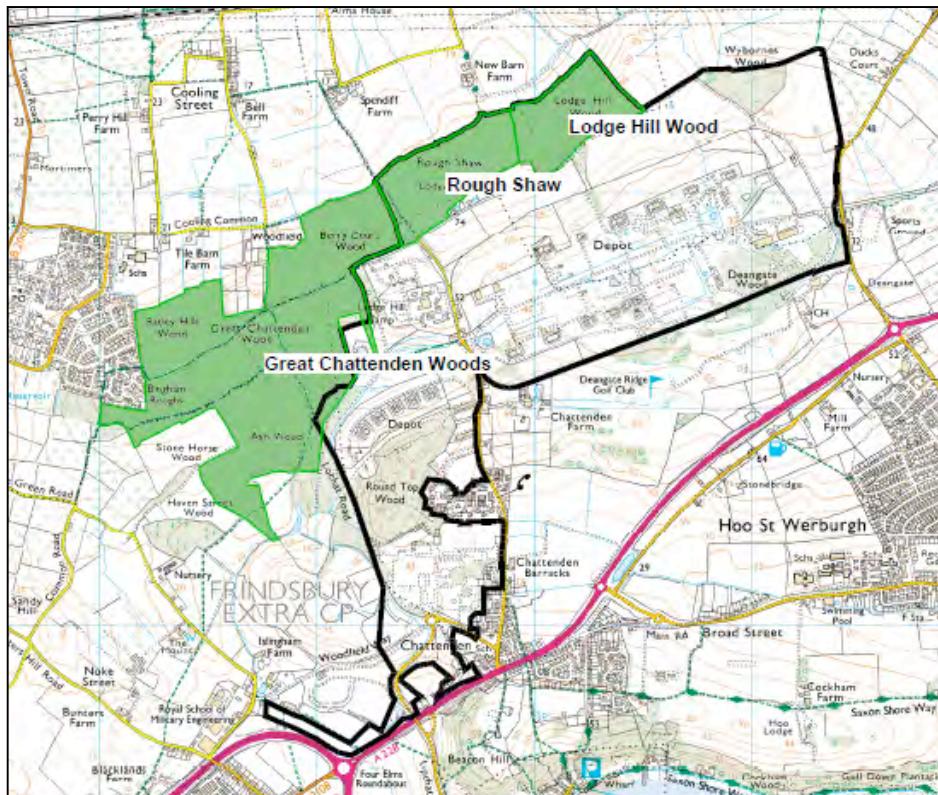


Figure 4.2: Chattenden Woods SSSI

- 4.66 Given the scale of the site and the length of the development timetable, repeated and more detailed surveys will be required throughout the planning application process (at both outline and detailed stages). Mitigation of any impacts on the ecology interest of the site and its surroundings will be possible but only with a thorough understanding of what that interest is.
- 4.67 Some species on and around the site are not legally protected but are still of conservation concern. Among these are a large number of nightingales, which breed around the site. This may represent around one per cent of the total UK population, which increases the significance of any impact the development may have on this species. The nightingale population has been raised as a concern in many of the consultation events to date.
- 4.68 The development of Lodge Hill has potential for both direct and indirect impacts on ecology. Direct impacts mainly relate to loss of habitat. Indirect impacts can include:
- increased disturbance from new population, traffic etc;
 - impact of localised air quality issues;
 - fragmentation or isolation of habitats;
 - predation or competition from pets and other animals associated with urban areas.
- 4.69 SSSI land and ancient woodlands are protected by other policies and will not be developed, although there is still potential for indirect impacts here. The remainder of the site is a patchwork of habitats, each of which has potential to support biodiversity. In some cases, it is also the combination of habitats that adds more value. It is therefore inevitable that there will be some loss of habitat as a result of the development. However, the impact of this should be mitigated as far as possible, by prioritising the protection and retention of the

most valuable habitats. This should be determined with reference to the following criteria (not in order of priority):

- The intrinsic importance of the habitat, at a national, regional and sub-regional level, including whether it is a priority habitat in the UK or Kent Biodiversity Action
- Plans.
- The range of species supported, including the range and number of protected, priority or conservation concern species.*
- The population size of the species present.
- The extent to which the habitat is isolated or forms part of a wider ecological network.

**Habitats supporting some species are also protected by law.*

- 4.70 Where habitat supporting protected or priority species is lost, it must be re-provided. This applies not only to direct loss to development but where indirect impacts such as disturbance mean that it is no longer functional for the relevant species. The preference is for this to take place within onsite green infrastructure. Where this is not possible, offsite mitigation must be provided. This should be provided as close to the site as possible and should remain within the Hoo Peninsula at worst case.
- 4.71 The replacement habitat must be of equal or greater value to the habitat lost, in terms of the species (and individuals) supported and its functionality. New habitat often does not support the same range of biodiversity as established habitat, so a larger area than lost may be required. This will be determined through the planning application process including up-to-date surveys.
- 4.72 Some existing habitats on the Hoo Peninsula are isolated and scattered. Larger blocks of habitat are more resilient to the impact of climate change. Developers of Lodge Hill should seek opportunities to locate replacement habitat adjacent to existing. As well as helping to restore links between existing sites, this will increase the functionality of the replacement habitat.

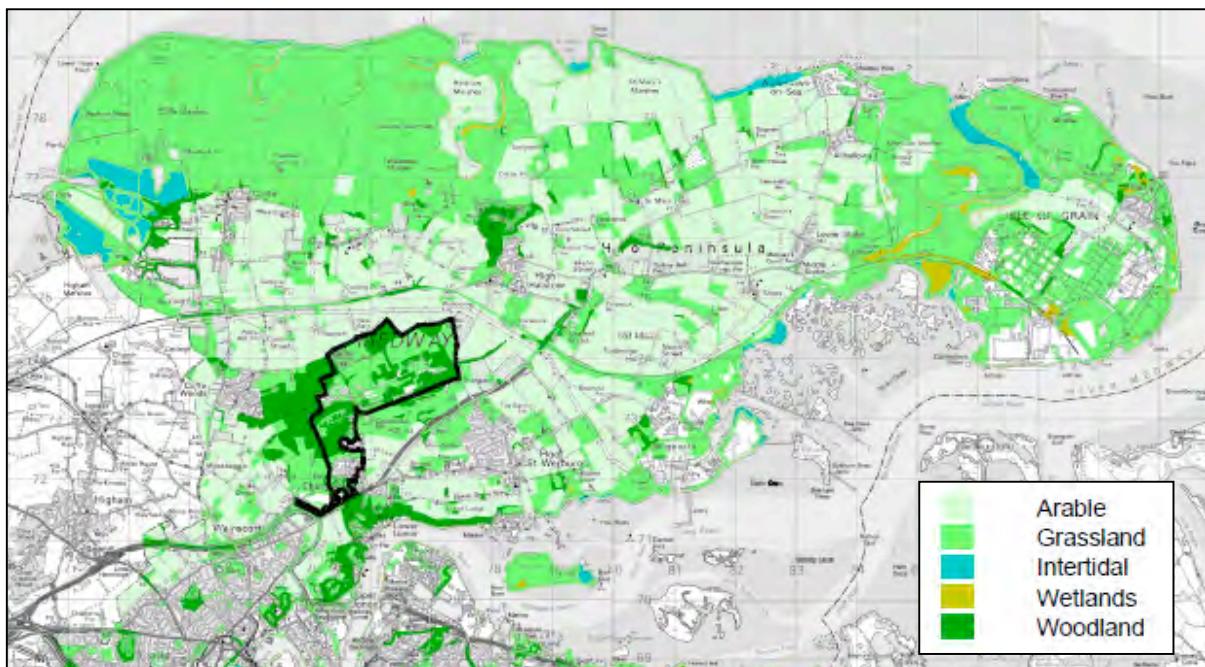


Figure 4.3: Habitat map of the Hoo Peninsula

- 4.73 The timing of provision is also crucial. Good quality habitat takes time to establish. New habitat must be ecologically functioning before the area it is replacing is developed. Some habitats (such as woodland) can take a long time to establish successfully. The ease of replacement may therefore need to be taken into account when determining which areas are to be retained.

EN26 ➔ Habitat loss within the site should be avoided wherever possible, with highest priority given to high value habitats*. Where this is not possible, replacement habitat should be provided. For high value habitats, this re-provision should be greater than like-for-like in terms of area. The location of replacement habitat should maximise its contribution towards a wider ecological network through linkages and corridors outside of the site boundary.

**High value habitats, for the purpose of this document, are those with the highest intrinsic value, or those that support populations of protected species or species of conservation importance.*

- 4.74 Woodland birds are particularly vulnerable to indirect impact. Trampling and vandalism can also damage the SSSI's woodland habitat. This risk to the SSSI increases the closer development is sited to its edge. Residential development is likely to have the greatest impact. A buffer zone around the northern edge of the site is therefore needed. A distance of 200m should be taken as a guideline. The Chattenden magazine compound is an exception to this. As it is behind a secure wall, this would prevent much of the possible impact.

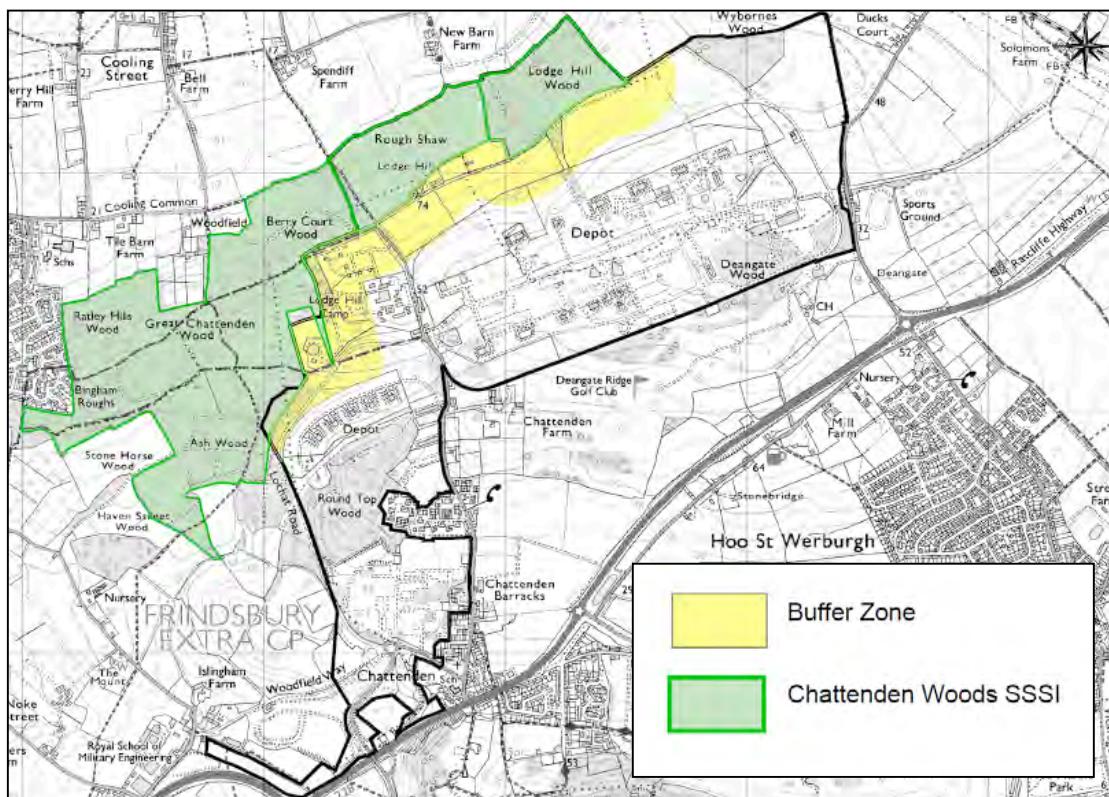


Figure 4.4: SSSI buffer zone

- 4.75 It may be possible to reduce this 200m in some areas. Any proposals for a reduced buffer would have to demonstrate that there would be no harm to the SSSI as a result.
- 4.76 The buffer zone does not have to be a sterile area. As much of it as possible should be left undeveloped, but the uses in Table 4.1 could be acceptable within this area. Uses that would attract activity (whether included in this table or not) should be located as far as possible from the SSSI boundary and the impact of any increased activity would require mitigation.

Land use	Comments
Balancing ponds	
Sports pitches/pavilion	
Community building	Would need to be conscious of food waste e.g. attracting rats
Informal open space e.g. countryside park	
Nature trails	
Education or visitor centre	
Schools	Would need to be conscious food waste e.g. attracting rats
Play areas	
Car parks	When provided in association with other acceptable uses
Allotments	
Golf course	
CHP (combined heat and power) plant	Noise and air quality assessments needed
Sewage treatment plant	Water and air quality assessments needed
Commercial development	Would depend on the exact nature of the use. Would need to be conscious of food waste e.g. attracting rats
Elderly/other specialist housing	Subject to suitable management regime. Would need to be aware of food waste issues and prevent keeping of pets.

Table 4.1: Possible uses within SSSI buffer zone

- 4.77 There are two existing public rights of way through Great Chattenden Woods. These are important for connecting Lodge Hill to surrounding communities, but will need to be carefully managed to ensure that their use does not damage the SSSI. Fencing and defensive planting may be needed along the edges of the footpaths to prevent people straying into the rest of the woods. There should be no additional access to the SSSI itself. Landscaping proposals for the buffer should support this by discouraging access and activity in the more sensitive areas.

EN27 ➔ A buffer zone should be provided to the SSSI to limit the indirect impacts of development. Justification will be needed where this is proposed to be less than 200m. Access management, education and information strategies should support this buffer zone. Proposals for development in this zone will only be supported where it can be

demonstrated that they do not undermine the purpose of the buffer or cause unacceptable impacts on the SSSI.

- 4.78 Ancient woodland does not have the same statutory protection as the SSSI, but can still be damaged by inappropriate use. Between 20m and 50m should be sufficient for buffers to these areas (subject to detailed consideration of the impacts of specific proposals). It may be possible to allow or encourage increased access to one or more specific areas of woodland. This could reduce the desire for people to use the more sensitive areas. Deangate Wood, for example, may be able to withstand a greater degree of activity than some other areas. The ancient woodlands would benefit from being included in the access management strategy for the SSSI.

- 4.79 Biodiversity in Britain has been declining for some time. As an exemplar of sustainability, Lodge Hill should follow best practice in including biodiversity within the development. Landscaping proposals should maximise the ecological benefits of all open space within the site, from large-scale parks to roadside verges. Opportunities for buildings to contribute to biodiversity should also be taken, for example through the provision of green and brown roofs and green walls.



- 4.80 Best practice development should increase the biodiversity of a site after it has been developed. This should be Lodge Hill's aim. The range of wildlife already supported by the site means that there may not be significant opportunities within the site boundaries. However, off-site enhancement (for example, provision of new wildlife corridors) should be considered.



Figure 4.5: Green walls and roofs

EN28 ➔ Biodiversity should be integrated into Lodge Hill through the landscaping strategy for open spaces and through provision of measures on and within buildings. Development should result in no net loss of biodiversity from the site (including any off-site replacement habitat) and should aim to deliver a net gain in biodiversity within the local area, including through habitat linkage corridors.

- 4.81 The network of habitats across the Hoo Peninsula includes large areas of mud flat and grazing marsh, which support vast numbers of wading birds, particularly during winter. Much of these are designated as Special Protection Areas (SPAs) and Ramsar Sites. SPAs and Ramsar sites are international designations, which shows how important these sites are.
- 4.82 Bird numbers have been declining in these important sites and there is not currently any clear information to explain why. Recreational disturbance may be one cause. This is where increased use of the shoreline and rural areas disturbs birds. It can lead to reduced breeding success or simply make the site less attractive to birds, which therefore locate elsewhere. In other areas, such as the Thames Basin Heaths, dog walking has been a particular concern.

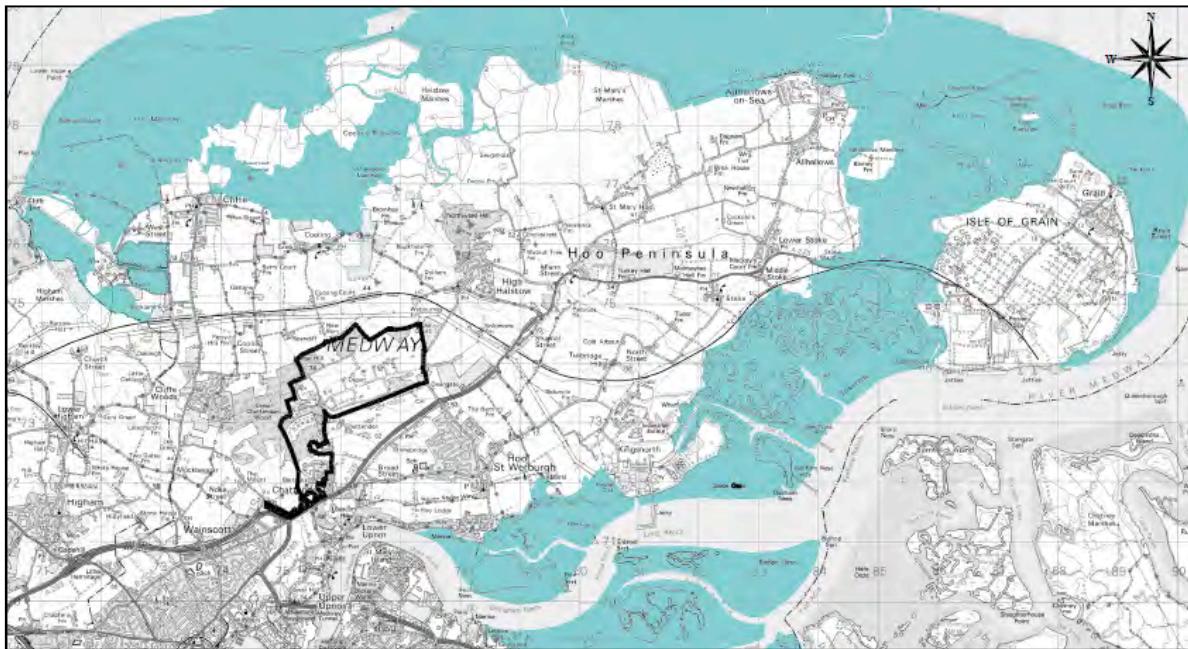


Figure 4.6: SPAs and Ramsar Sites on the Hoo Peninsula

- 4.83 Medway Council, together with a number of partner organisations, has commissioned detailed research into this. Phase one results suggest that while recreational disturbance may not be the whole cause, it does have an impact.

4.84 If recreational disturbance is one of the causes of the bird decline, Lodge Hill could have a harmful impact on the SPAs and Ramsar Sites. An additional 12,500 people living in close proximity to the North Kent SPAs could lead to significantly more people accessing these areas. This will have to be closely monitored. If monitoring shows unacceptable impacts, additional measures must be agreed and put in place.

EN29 ➔ Proposals for Lodge Hill, and in particular the EIA for any outline application, must have regard to the latest available information on bird decline in the nearby SPAs and Ramsar Sites. If recreational disturbance is found to be a potential cause of bird decline, the developers must provide mitigation measures and ongoing monitoring of the impacts of their proposals.

4.85 Mitigation measures can include:

 - education and information provision for residents moving into the area;
 - management plans for affected areas, e.g. *dogs on leads* areas, or restricted access at certain times;
 - warden patrols of affected areas to ensure responsible behaviour by visitors;
 - provision of alternative destinations to reduce the number of people visiting the sensitive areas (the success of this depends on why they are visiting and whether the relevant features of the sensitive sites can be replicated elsewhere).

4.86 The area affected by bird decline is much wider than the immediate vicinity of Lodge Hill. Any mitigation for impact on the SPAs and Ramsar sites is therefore likely to be through a financial contribution to wider schemes.

- 4.87 Increased recreational pressure may also be an issue at some nearby SSSIs. Northward Hill, Dalham Farm and Tower Hill to Cockham Wood are within walking or cycling distance of Lodge Hill. Developers must ensure that any potential impact on these sites has been properly assessed. They must also propose and provide suitable mitigation. Potential mitigation measures and monitoring requirements are likely to be similar to those for the SPAs and

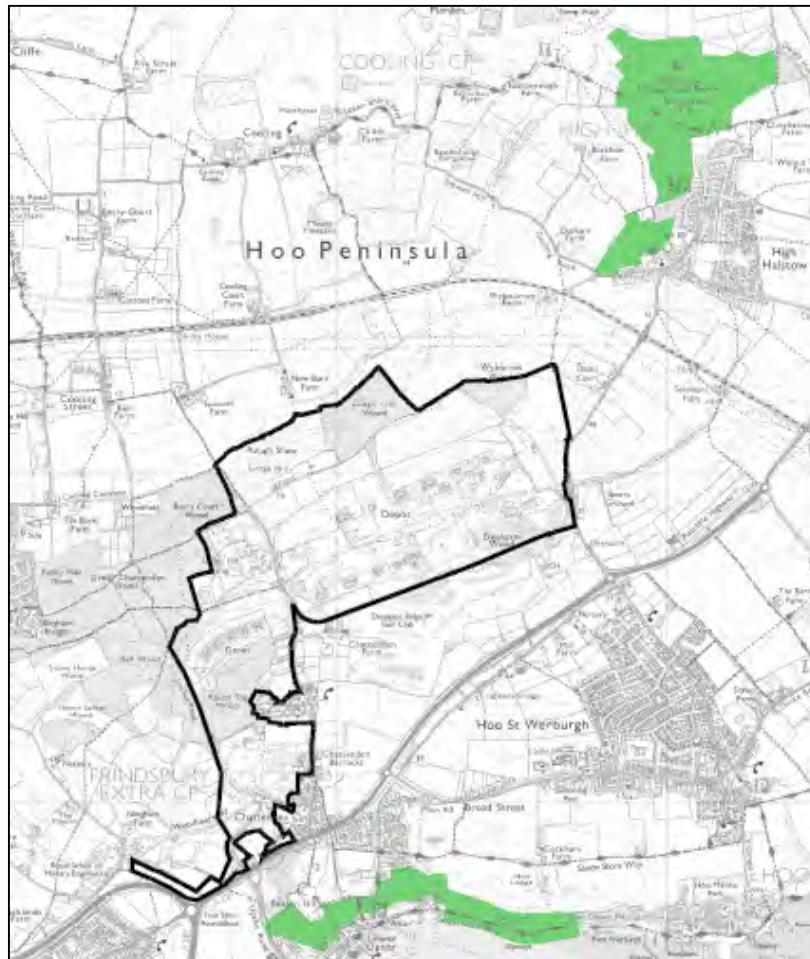


Figure 4.7: Northward Hill and Tower Hill to Cockham Wood SSSIs
Ramsar Sites.

EN30 ➔ An assessment of likely impacts on nearby SSSIs should be carried out as part of the EIA for Lodge Hill. Where impacts arising from the development are identified, the developer must provide mitigation measures, and ongoing monitoring of these.

5

Chapter five Transport

Transport Strategy

- 5.1 The vision for Lodge Hill will not be realised without a strong transport strategy. The development will inevitably cause an increase in traffic. It is important that the existing road network is improved where needed to cope with this. However, it is not possible to simply cater for unconstrained traffic growth. As well as sustainability issues, increased cost and greater land-take, this would impact on quality of life for local communities. It is therefore essential that measures are put in place to reduce private car use in favour of lower-impact modes of transport.
- 5.2 Mixed-use development can reduce the need to travel. Applying this principle at the scale of a new settlement means that most day-to-day needs of future residents can be provided for on site. The previous chapters have outlined the scale of provision necessary for this.
- 5.3 For the remaining travel, the sustainable transport hierarchy is well established, as set out in the government policy document *Manual for Streets*. This gives priority to the most sustainable modes of transport. It also supports healthy lifestyles, as an increase in walking and cycling is an easy and effective way to improve the health of a community.

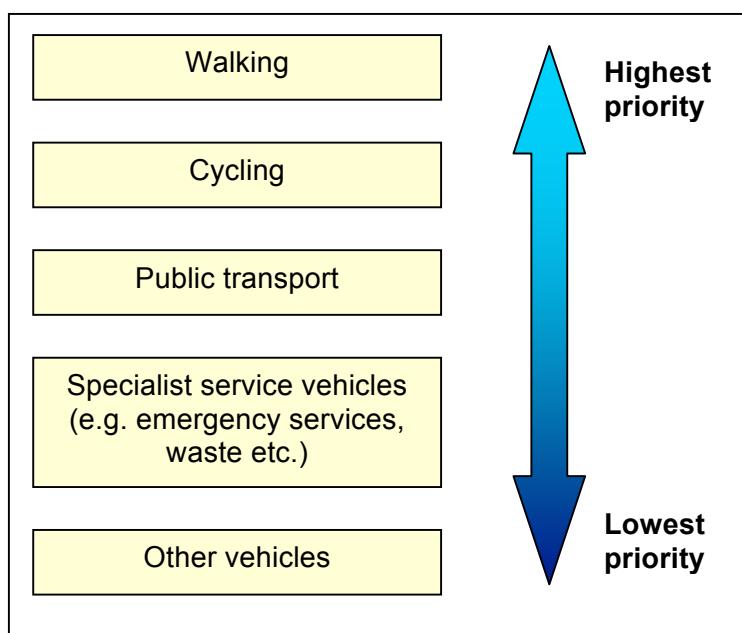


Figure 5.1: Transport hierarchy

- 5.4 Movement networks within the site, and transport proposals linking the site to Medway and beyond, will be expected to follow this transport hierarchy. Within the site this should be achieved by filtered permeability. It should be easier for a resident to walk or cycle to their destination than to drive.

T1 ➔ A Transport Assessment, including a Travel Plan, must be submitted in support of any outline planning application for Lodge Hill. All applications should demonstrate that the required transport infrastructure will be in place as it is needed; that the proposals enable and encourage sustainable transport choices by residents and businesses; and that the transport impacts of construction stage have been considered and addressed.

Walking and cycling

- 5.5 Walking and cycling are viable modes of transport for almost all journeys within the site. A permeable, attractive and safe network of cycle and pedestrian routes should be provided within the site. These should connect residential areas to key destinations such as the town centre, local hubs and schools. The route for a pedestrian or cyclist should be more direct, and quicker if possible, than for a vehicle. As many dwellings as possible should be within ten minutes walking distance of a hub.
- 5.6 Pedestrian and cycle networks should be given greater priority than vehicle routes where there is a potential conflict. There may be some circumstances where this is not possible, particularly on the main site access roads. Where this is the case, proposals must include a convenient and safe alternative route for pedestrians and cyclists. This should not undermine the general principle of directness.
- 5.7 Ideally, the green grid should be used for the foot and cyclepath networks. This will have to be carefully handled in the more ecologically sensitive areas. For example, the lighting strategy for footpaths within the green grid will have to take account of any foraging routes used by bats.

T2 ➔ A network of pedestrian and cycle routes shall be provided linking homes and businesses to destinations on site. This network should be attractive, safe and direct, making use of the green grid where possible.

- 5.8 Shared surfaces should be considered for mixed-use areas and residential streets. A high proportion of shared surface areas on site would send a clear message that pedestrians and cyclists are welcomed and encouraged. However, they must be designed as part of a holistic movement strategy to ensure that other objectives of the transport strategy are not compromised. Hard and soft landscaping in shared surface areas should be designed to provide psychological as well as physical traffic calming. Home zones or similar treatment should be considered for some of the residential areas.

T3 ➔ Shared surfaces and Home Zones (or similar) should be used where possible.

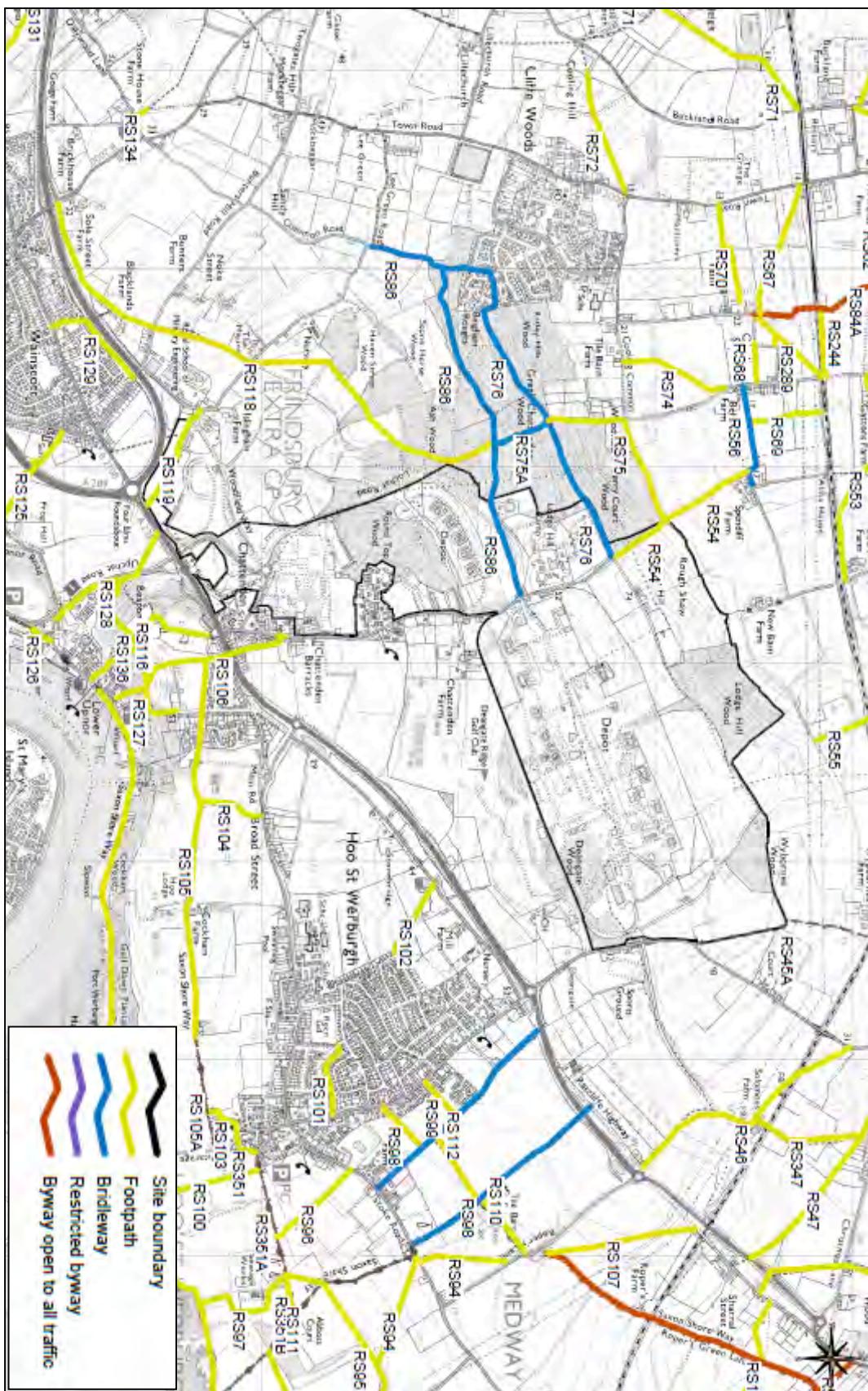
- 5.9 Shared surfaces do, however, have implications for inclusive design. Blind and visually impaired people can find them difficult to use. There are design features that can mitigate this without undermining their purpose, and these should be considered at the detailed design stage.
- 5.10 Off-site pedestrian and cycle routes fall into two categories: Functional links and leisure provision.
- 5.11 Functional links would not only cater for residents and businesses on the site, but would enable existing nearby communities to access jobs and services at Lodge Hill. There are five key links that should be considered:
- Cliffe Woods
 - High Halstow
 - Hoo St Werburgh
 - Wainscott
 - Medway City Estate

- 5.12 Many of these links will run alongside or cross busy roads. The A228 and A289 separate the site from Hoo St Werburgh and Wainscott. Dux Court Road connects High Halstow to the site and is likely to become one of the new site accesses. These routes will need to ensure that pedestrian and cyclist priority is provided at junctions. In some cases bridges above the carriageways may be the only feasible solution. These should be designed so that the necessary height can be achieved without significant route diversions. This avoids tempting pedestrians and cyclists to take the more direct route at grade, which has obvious safety issues.
- 5.13 There are existing public rights of way which connect the site to Cliffe Woods. These are much more direct than the road network but run through the Chattenden Woods SSSI. The draw of the services at Lodge Hill and the need for access must be balanced with the need to protect the sensitive ecology in this area.
- 5.14 Medway City Estate provides a large concentration of jobs that could serve the population of Lodge Hill. It is beyond easy walking distance from the site but would be within cycling distance. The roads linking Lodge Hill to Medway City Estate are heavily trafficked and high speed, and not attractive for cyclists. The potential for an off-road cycle link from the site should be explored. If this is not feasible, any improvements to road links should include provision for cyclists.

T4 ➔ Any road link improvements required for Lodge Hill should incorporate pedestrian and cycle links to neighbouring villages and Medway City Estate. Off-road links should also be considered where possible, if these would facilitate a more direct, safer or more useable route.

- 5.15 The Hoo Peninsula has a dense network of public rights of way. Because of its long military usage, the Lodge Hill site and its immediate surroundings are not well connected to this network (see Figure 5.2). Linking the site back in would benefit residents of the new settlement and surrounding communities. The council also has a wider ambition to improve the accessibility of its rural areas.
- 5.16 Where links can be made within the site or adjacent land in the same ownership, proposals should be brought forward as part of planning applications for the site. Where links cross third-party land, an alternative approach will be needed. This may include financial contributions. The council has some powers to create new rights of way and other footpaths, and a record of working with local landowners. It may therefore be more able to deliver off-site accessibility improvements than the developer. This would also help to offset pressure on nearby farmland from the new community.
- 5.17 Although there are existing bridleways on the Peninsula, they are not currently well linked. Proposals to improve connectivity from Lodge Hill should consider improvements to this particular part of the network.

T5 ➔ Improvements to connectivity of footpaths, cycle routes and bridleways in the vicinity of the site should be undertaken. These should promote the wider aim of improved accessibility across the Peninsula, and be coordinated with the council's wider strategy.



Public Transport

- 5.18 For longer trips, public transport is the main alternative to private car use. Existing public transport on the Peninsula is limited. The main bus route is currently route 191, serving Hoo St Werburgh up to four times an hour. It takes a lengthy route through Medway as it also serves some of the residential areas of Strood, and only extends to the rest of the Peninsula once an hour. Evening services to the Peninsula are also limited. Meeting the vision for Lodge Hill will require a step change in public transport provision. Significant modal shift from private cars is needed to meet sustainability objectives and limit the impact of traffic growth.
- 5.19 Although a single-track freight railway runs around 600m to the north of the site, it is unlikely to be possible to upgrade this to passenger service. The level of future usage would also be unlikely to sustain a useful service, and would not justify the huge expense involved. Impact on existing rail services will need to be considered through the planning application process and there may be a need for investment in facilities at the nearest station (Strood) to cater for increased demand.
- 5.20 Improvements to the bus service are the only viable option for public transport to and from the site. A dedicated bus service to key destinations will raise the profile of public transport. Reliability, frequency of service and speed of route are key to increasing bus use. The Fastrack service in Dartford and Gravesham has followed these principles, and has been very successful. Reliability and speed of route can be best achieved by bus priority measures on the main road network. They would also ensure that the service has a high profile among potential users. Ideally, bus priority measures should make taking the bus quicker than driving.

T6 ➔ The road network between Lodge Hill and the main urban area shall be upgraded to provide bus priority on all relevant links and junctions.

- 5.21 Figure 5.3 shows the suggested route where bus priority measures should be provided. This would link to the council's proposals to improve public transport in the wider Medway area. The exact requirements will be dependent on the final bus route(s) proposed and an assessment of which links and junctions are most likely to cause delays. The road network within the site may not require specific bus priority measures. However, road design and any traffic control measures must ensure that the service remains quick and reliable within the site.
- 5.22 The final bus route has to be carefully considered. It must serve a large enough catchment to make the service viable, and must serve a range of destinations that people will want to travel to. However, it must also avoid slowing journey times too much with lengthy routes through residential areas to collect passengers.
- 5.23 The road network within Lodge Hill should enable a quick and straightforward route through the development. Key destinations within the site that should be directly served by bus stops are:
- town centre;
 - foodstore;
 - secondary school;

- local hubs and primary schools;
- main employment area(s).

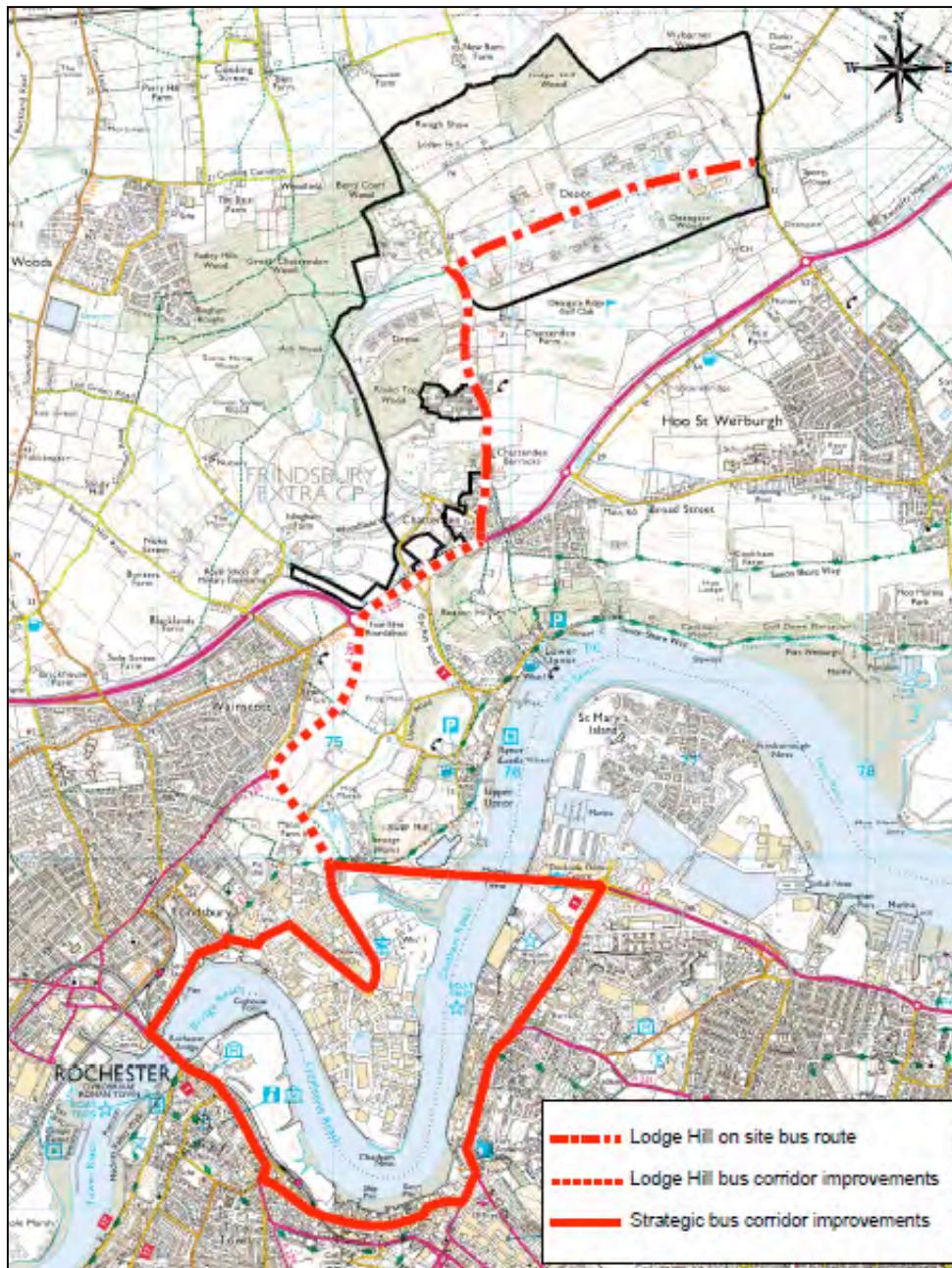


Figure 5.3: Indicative strategic bus corridor improvements

5.24 Key destinations that should be served outside of the site are:

- park and ride at Whitewall Creek (with interchange to urban routes);
- Strood rail station and town centre;
- Chatham town centre (including bus station);
- Rochester and/or Chatham rail stations;
- Chatham Maritime;
- Hoo St Werburgh.

5.25 It may be more practical to provide two separate routes. A shuttle to and from Strood station in peak periods would be a fast and direct service, taking advantage of an existing bus-only link at Canal Road. This would be a very

effective way of reducing commuter traffic and its potential impact on the strategic road network. This could then be supplemented by a service to the other key destinations.

- 5.26 There are some destinations that, while important, are simply not practical to serve with the dedicated bus route. Requiring the route to serve Medway Hospital, for example, would add significantly to journey times through dense urban area where bus priority could not be easily provided, and would therefore compromise the quality of the service. For destinations such as this, it is important that the bus service and route enables easy and reliable onward connections with the minimum of changes. The requirement to serve Whitewall Creek park and ride and Chatham bus station should enable this. Other factors such as smart and through ticketing will also need to be considered (see service standards, below).

T7 ➔ The bus route(s) proposed should serve the key destinations set out above.

- 5.27 A bus company will be appointed to run the service and will need to ensure that it is practical and achievable. However, the council will expect a very high quality service to be provided. Passengers need to be confident that they can rely on it, and it should be perceived as a different class of provision to the service the area has had previously. The standards that the council will seek are set out in box 5.1, although final details will be determined at a later stage.

- At least 85 per cent of dwellings in Lodge Hill should be within 5 minutes walk of a bus stop.
- Real time information should be provided at all bus stops within the site, in key publicly accessible buildings and (where possible) within individual residential and business properties.
- Where real time information is not already available at key destinations outside the site, a financial contribution will enable this to be provided.
- Weekday peak time services should run at least six times an hour (every 10 minutes). Peak times are 07:00 to 09:00 and 16:00 to 19:00.
- Remaining weekday services and Saturday daytime services should run at least four times an hour (every 15 minutes).
- Sunday and evening services should run at least twice an hour (every 30 minutes). Evening services should begin no earlier than 20:00. The last bus from Chatham should depart no earlier than midnight.
- Smart ticketing, through ticketing and pre-pay services should be provided where possible.
- Fares should be set at a level that does not discourage bus use.

Box 5.1: Proposed bus service standards

- 5.28 Initial discussions with a local bus company suggest that these standards should be possible. The service will require developer support to become established, but should be self-sustaining by the time the development is complete. However, this is reliant on sufficient passenger numbers using the service and this will only be achieved if **all** of the components that make the

bus service recognisably high quality are in place. Final proposals will need to be considered very carefully to ensure that they will be able to be maintained after the development and any extended subsidy period have ended.

T8 ➔ The proposal for bus service provision should aim to meet the standards in box 5.1. Variation of these standards will be considered where there is a sound justification, but should not significantly reduce the quality of the service. Where agreed standards cannot be met commercially from the outset, developer subsidy will be required.

- 5.29 The council aims to introduce a smart ticket system across Medway. It is not known whether this will be in place by the time the Lodge Hill bus service is required, but other bus services in Medway have begun installing the required equipment so that when full funding is available the system can be rolled out. The Lodge Hill service should consider making smart cards available from the outset if feasible, but if not should make sure that the technology is in place to adopt the system once it is established.
- 5.30 A high quality bus service should be provided from the beginning of the development. It should be in place at the point the first parcel of residential properties are occupied. While it may not be feasible to provide the final service at that point, the full route and frequency of service should be phased in as soon as possible.
- 5.31 It is crucial that people moving to early phases of Lodge Hill are able to form sustainable travel habits. Therefore, bus priority measures will be sought from the outset to ensure that the quality of service and benefits of bus use are clear to early residents. If the full bus priority measures are to be phased in, the developer will be required to make the service attractive in other ways. This may include the provision of free or subsidised bus season tickets for residents and businesses.

T9 ➔ The bus service can be provided in phases provided there is still a high quality service from the outset. Bus priority measures should be provided as early as possible, and if phasing of these reduces the attractiveness of bus travel for early residents, alternative measures to promote the bus service will be sought.

- 5.32 Provision of free or subsidised season tickets while the bus service establishes should be considered regardless of the bus priority phasing. This would help to form sustainable travel habits among new residents and meet the target for modal split. The Transport Assessment should provide a clear analysis of modal split to inform whether these additional measures will be needed, and for how long. There should also be a system in place to monitor modal split once the development has commenced. If targets are being missed, additional measures such as subsidised tickets can be brought in as needed.

T10 ➔ Consideration should be given to provision of subsidised bus tickets to improve modal shift.

Site access

- 5.33 Figure 5.4 shows the main road network in the vicinity of the site. There is only one main road on and off the Hoo Peninsula; the A228. The Wainscott

Bypass (the A289) passes fairly close to the edge of the site. However, the land between is very visually sensitive. It will not be possible to take a busy road through this area without destroying its landscape character. This means that the only option for site access is via the A228.

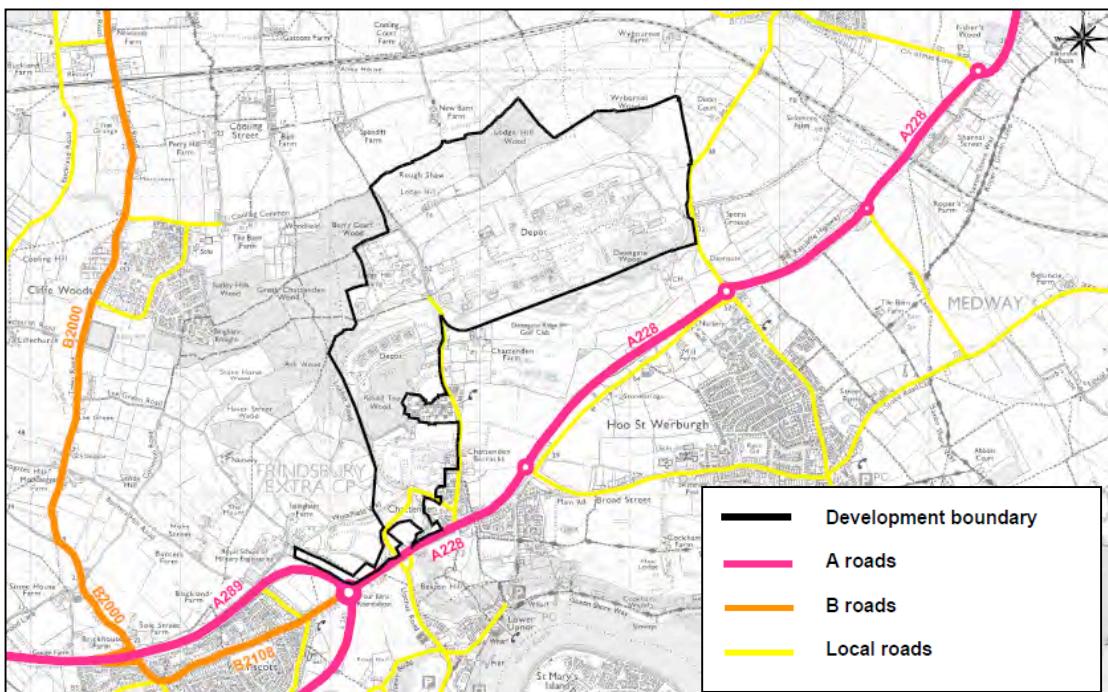


Figure 5.4: Local transport network

- 5.34 There are already two roads into the site: Chattenden Lane and Lochat Road.
- 5.35 Chattenden Lane serves the existing village of Chattenden as well as the military site. It has existing properties on both sides, which limits the potential to increase its capacity. Although it could serve a higher level of traffic than existing with fairly minor upgrades, it is unlikely to be suitable as the main site access. The bus route may need to follow this road to ensure that the Chattenden end of the development is within the required distances for bus stops. Although the road is already used by infrequent bus services, a more regular use may require redesign or removal of the existing traffic calming.
- 5.36 Lochat Road is an MOD road and links Lodge Hill with the Upnors. It is used by civilian traffic as well as by the military. It is not directly accessible from Four Elms Hill eastbound, but as the intervening land is within MOD ownership a link could be made. A strip of land between Lochat Road and Four Elms Hill has been included in the strategic allocation for this purpose. Access arrangements will need to ensure that Lodge Hill traffic does not cause unacceptable levels of congestion on Four Elms Hill or interfere with the functioning of Four Elms roundabout.
- 5.37 Both existing roads are at the southwestern end of the site. Given the scale of the development, at least one access towards the eastern end will also be needed. Dux Court Road runs along the eastern edge of the site and meets the A228 at the existing roundabout with Bells Lane. This would be an obvious location for an eastern access. However, it would require widening and upgrading to accommodate a new access. The principles for an eastern access are that it should:

- enable a reasonable distribution of traffic to reduce pressure on the western accesses;
- ensure that there is an emergency route from all parts of the site if one access is blocked for any reason; and
- facilitate an internal road network that allows for good design, sense of place and ease of movement;
- enable safe and convenient access to facilities at Lodge Hill from the rest of the Peninsula.

T11 → The site must have accesses at both the eastern and western ends. The western accesses should use the existing roads where possible. The eastern access should consider using Dux Court Road but alternatives will be considered if this is not possible.

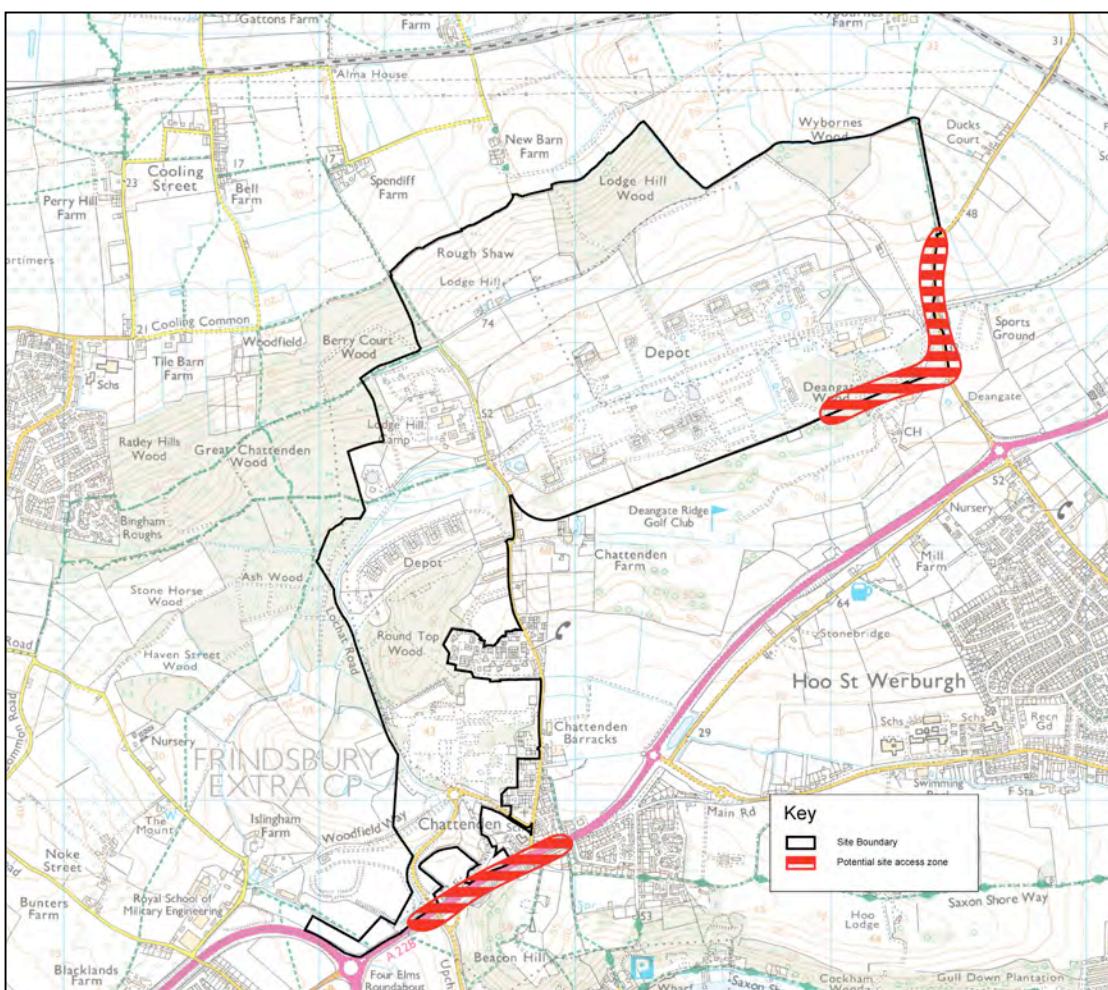


Figure 5.5: Site access zones

- 5.38 The evidence base for Lodge Hill has looked in some detail at transport issues. It shows how access could be achieved, but the final detailed design will be determined through the planning application process.
- 5.39 Consultation shows that transport is one of the local community's main concerns. In particular, there is a belief that Four Elms Hill will struggle to cope with increased traffic. These concerns are entirely understandable. Four Elms roundabout can suffer from congestion at peak times, generating queues on approach roads. Because the A228 is the only main road on and

off the Peninsula, accidents or roadworks have a major impact. The only alternatives are through small villages and rural roads across a wide area. Consequences include traffic congestion and reduced accessibility for rural communities to services in the main urban area.

- 5.40 There are two main rat-running routes from the Peninsula (see Figure 5.6). Neither of these is suitable for high volumes of traffic. It can also cause amenity problems for residents along the routes. The impact on these routes must be considered as part of the transport assessment that will support the outline planning application. Any mitigation measures proposed must consider the need to maintain connectivity between rural communities while discouraging major increases in through traffic. It is likely that monitoring on these routes will be necessary during the development period to determine the extent of intervention that may be needed.

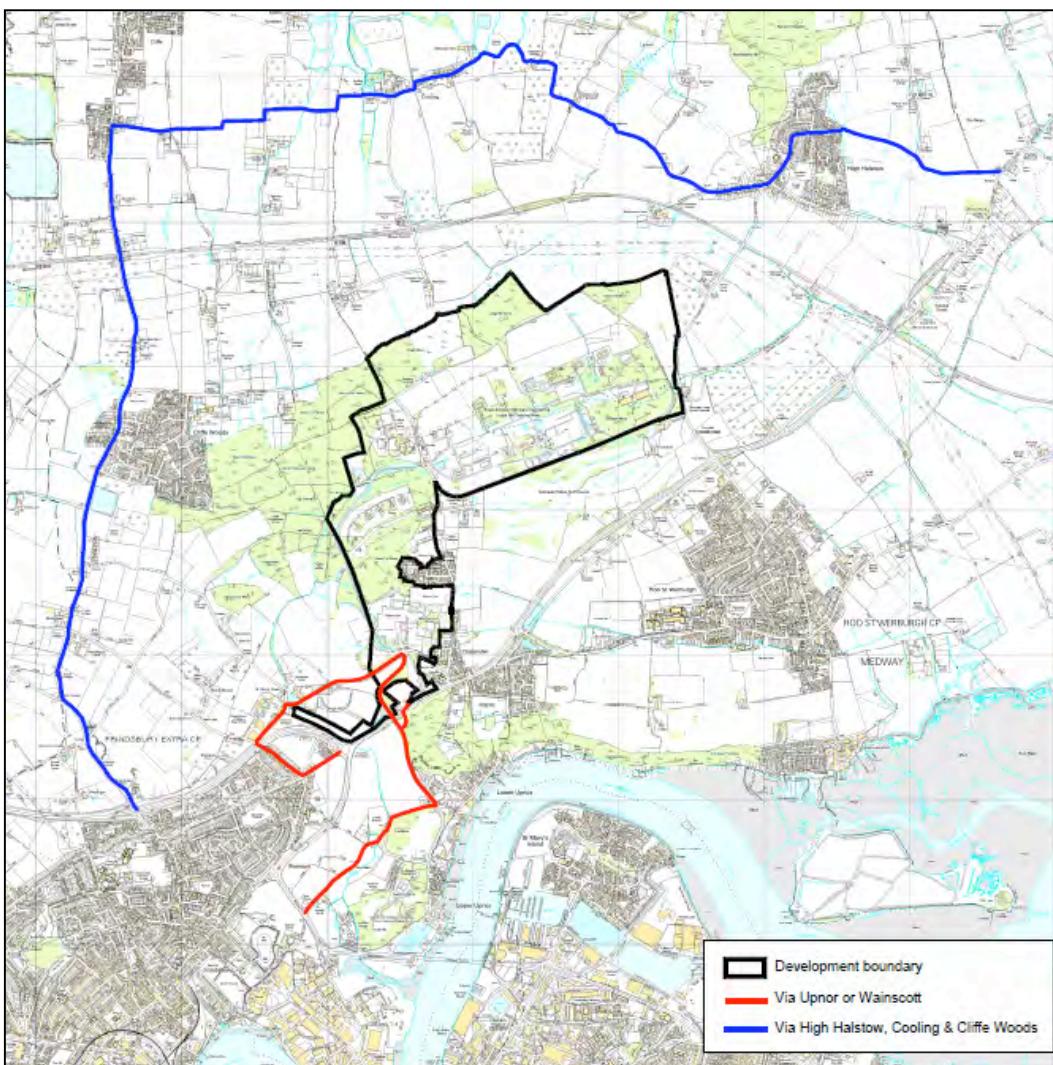


Figure 5.6: Rat-running routes

- 5.41 Transport work carried out for the draft Core Strategy showed that the main capacity issue is with Four Elms roundabout rather than Four Elms Hill itself. Improvements to the roundabout will be required to cater for traffic from the development. However, there will still need to be some improvements to Four Elms Hill. Bus lanes will need to be provided. It would be advisable to allow right turns out of Chattenden Lane, at least for buses.

- 5.42 There is an existing bridge across Four Elms Hill, which carries Upchat Road between Chattenden and the Upnors. It has raking piers that limit the potential for road widening. This is a major constraint if bus lanes are to be provided without reducing capacity for general traffic. It is therefore likely that this bridge will have to be replaced in order for the improvements to Four Elms Hill to be carried out.
- 5.43 This will be much more complicated once the bridge is in use as one of the main accesses for Lodge Hill. Its phasing should therefore be carefully considered. Land levels, ecology designations and landscape character issues mean that the bridge will have to be replaced in its existing location.

T12 ➔ Improvements to Four Elms Hill and Four Elms roundabout to cater for increased traffic from Lodge Hill will be required. Proposed improvement schemes should consider the need for, and timing of, replacement of the existing Upchat Road bridge.

- 5.44 The transport assessment will determine when the road improvements are required. This will also be affected by the phasing of the development. An early start at the western end, for example, would bring forward the requirement for works to Four Elms Hill and the Upchat Road bridge.
- 5.45 Wherever development begins, Four Elms roundabout will be affected and there is likely to be an early requirement for improvements here. However, it may be possible to accommodate the increase in traffic from the first few years of development with relatively minor changes. Again, the transport assessment will determine how the full works should be phased.

T13 ➔ The improvements to Four Elms Hill and Four Elms roundabout will be phased in line with the traffic impact of the development, subject to the need for early provision of bus priority measures.

Wider road network

- 5.46 Traffic modelling to inform the draft Core Strategy shows where congestion hotspots would occur in the future. Traffic from Lodge Hill would contribute directly to congestion at Junction 1 (J1) of the M2 and on the roads between Four Elms roundabout and the Medway Tunnel. There is also a potential indirect effect on J3 of the M2. Without improvements to reduce congestion near to the site, traffic through J3 could increase as people avoid the A289.
- 5.47 Any solution for the A289/A228 corridor must cater for traffic from other growth including Kingsnorth and Grain. Background traffic growth must also be considered. Because of this, it cannot be the responsibility of the Lodge Hill developers alone. The Lodge Hill developers will be expected to make a financial contribution towards the



Figure 5.7: Upchat Road bridge

improvements needed, in proportion to Lodge Hill's impact on the network. A detailed scheme for this link has not yet been drawn up.

- 5.48 The Medway Tunnel is a natural limit to capacity on this part of the road network. Any improvements to the A289/A228 corridor must recognise this. It is important to prevent traffic queuing in the tunnel if at all possible, for safety reasons.
- 5.49 The M2 junctions are the responsibility of the Highways Agency. Impacts here will also need to be addressed through a financial contribution. It may be possible to deal with the impact on this junction through ramp metering (controlling traffic onto the motorway, usually through traffic signals on slip roads) rather than any major physical works.

T14 ➔ Any impact on the road network beyond Four Elms roundabout (including at J1 of the M2) will be dealt with through financial contributions, based on the level of Lodge Hill's impact on the relevant road links.

Internal roads

- 5.50 Roads within the site should follow a hierarchy based on the amount of traffic they will carry. Table 5.1 compares the purposes and characters of the different hierarchy levels.

	Primary	Secondary	Tertiary
Description	Local distributor roads bringing traffic into and through the site from the main site accesses. Likely to serve over 300 properties.	Major access roads providing main access to residential and business areas. Likely to serve up to around 300 properties.	Local roads within business and residential areas. Include home zones or similar within residential areas.
Design speed	30mph	25mph	20mph or lower
Bus route	Yes	Yes	No
Pedestrian and cycle provision	Cycles share footways unless off-road routes nearby.	Cycles use roadway (or off-road routes). Footways.	Mix of footways and shared surfaces. Cycles use roadway.
On-street parking	Allowed	Allowed	Encouraged
Private accesses	Limited, but acceptable where safety not compromised	Yes	Yes
Traffic calming	Mainly where green grid and cycle/pedestrian routes meet road network.	As primary roads	Physical and psychological - equal priority to pedestrians, cycles and cars.

Table 5.1: Road hierarchies within Lodge Hill

- 5.51 Primary and secondary roads should create a networked and permeable layout. A single distributor road for all the traffic from the development would have a heavily urban character. It is preferable that traffic is distributed more evenly. This will ensure the roads fit better with the character of Lodge Hill as a whole.

T15 → The road network within Lodge Hill should be designed in a permeable layout that distributes traffic evenly and contributes to the character of the settlement.

- 5.52 The design of individual roads and development parcels should be driven by character rather than standards. The target maximum road speeds can be achieved in a variety of ways. Roads within the site can alter their character to respond to the setting and design of future development. Where there are special circumstances (such as roads adjoining sensitive ecology areas, or in the town centre) some variation from the standards may be acceptable.

T16 → The hierarchy standards set out in Table 5.1 should be applied sensitively, taking into account the setting and design of each individual area of development. Proposals for variation of these standards will be considered where there are benefits to the character of the development or other special circumstances.

- 5.53 The need to control traffic speeds often requires traffic calming. In existing residential areas the retrofitting of speed bumps, chicanes, mini roundabouts and similar can be very harmful to the character of an area. They can also cause amenity issues, such as noise from cars negotiating speed bumps.
- 5.54 In a new development like Lodge Hill, traffic calming can be designed in from the outset. This enables less intrusive measures to be used.
- 5.55 This should include passive (or psychological) traffic calming, for example where pedestrian activity or parked cars encourage drivers to slow down. Active measures like raised tables and chicanes can also be used, if they are an integral part of the urban fabric or landscape design. Vertical deflection (mainly speed bumps) should be avoided where possible. If done well, integrated traffic calming can reduce the need for street clutter like railings and signage.

T17 → Traffic calming should be integrated into road design from the outset and make use of urban design and landscape features.

- 5.56 An outline planning application should set broad principles for the layout of the primary road network, and for road design across the whole site. Detailed design, including traffic calming, will be at a later stage. It will have to work within the parameters set at outline application stage. The information submitted with an outline planning application should include a menu of traffic calming options. Developers of individual parcels can then apply those which are most appropriate.

Parking strategy

- 5.57 Car parking is a crucial part of any new development. It affects sustainability (and health) by making it more or less easy to use the car instead of other modes of transport. It has to be provided in a safe and secure way to reduce

the potential for car crime, and it has to be incorporated into the design of a place so that the car does not dominate the public realm. The amount of parking, where it is provided and how it is managed are all relevant.

- 5.58 The council's adopted parking standards give minimum levels of parking for residential development. There is a caveat for highly sustainable locations, where the level of parking can be reduced. This will apply to Lodge Hill, especially its central areas. The site will have services and facilities, will be highly walkable, and will have excellent public transport connections.
- 5.59 The way that parking spaces are allocated has a major impact on the overall level of parking demand. It is more efficient to not allocate parking spaces to an individual property. Figure 5.8 demonstrates this. However, it is acknowledged that housebuilders and homebuyers tend to prefer at least one guaranteed parking space for each property.

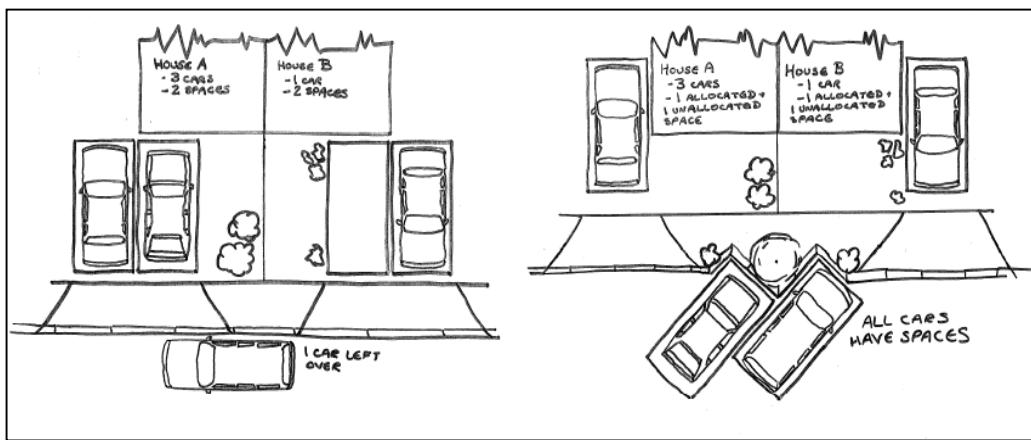


Figure 5.8: Parking and allocation

T18 ➔ A site-wide parking strategy for Lodge Hill should be submitted with an outline planning application (or through its conditions) and updated regularly thereafter. It must balance sustainability and design issues with the need to meet demand, and should cover both residential and commercial parking. Developers should not over-provide parking. The criteria set out in para. 5.59 should be considered when determining the level of parking for each detailed application. As many spaces as possible should be provided on an unallocated or shared basis.

- 5.60 The exact amount and distribution of parking for each development parcel will be determined at detailed application stage. Consideration should be given to the following criteria:
- The implications for design and character.
 - The size and tenure mix of housing proposed.
 - The location of the parcel within the development.
 - The need to promote sustainable transport and healthy lifestyles.
 - Evidence from previous phases regarding public transport patronage, walking rates and car use.
 - For commercial developments, the need to support the economic role of Lodge Hill.
- 5.61 The English Partnerships (now Homes and Communities Agency) document *Car parking – what works where* is a useful reference for how to integrate

parking into urban design. Developers should make full use of this resource. Vehicles should not be allowed to dominate the character of an area.

- 5.62 How parking is provided can have a major influence on how attractive car travel is. This includes location and type of parking spaces. It can also include parking charges. Developments both in the UK and abroad have adopted this approach and some have been very successful in reducing car ownership and use. However, it is only viable where suitable alternatives are in place.
- 5.63 It would not be fair or realistic to charge for all parking at Lodge Hill. Given its rural location, even with new public transport links there will still be a need for car transport. However, if a functional level of allocated parking is provided, charging for additional parking, for example in the form of residents' parking permits, would not punish households for needing a car, but could discourage second (or subsequent) car ownership. It would be possible to discount permits for electric or low polluting vehicles, to increase the sustainability benefits. Any proposals for parking charges would need to have a clear strategy for managing the impact on existing communities adjacent to the site.
- 5.64 Charging for town centre parking should also be considered. This should particularly aim to discourage long stay car parking to prevent abuse of the facility, for example by commuters wanting to use the fast bus link to the station. The foodstore will have a specific parking requirement, but this should be shared with the town centre generally. There are many examples of foodstores refunding parking charges for customers spending over a certain amount, which could be implemented here, if required, by the store operator.
- 5.65 Any Community Trust for Lodge Hill (see Chapter 2) could manage any parking regime. This would enable any proceeds to be re-invested in initiatives to encourage sustainable transport or other community priorities. Giving the community direct control of the scheme and its proceeds could also improve perception of the scheme.

T19 ➔ Consideration should be given to the location and management of parking provision. This should include consideration of charging for a proportion of on-site parking provision.

- 5.66 Another advantage of communal unallocated parking is the flexibility to re-use the land if parking demand decreases in the future. If a Community Trust runs the scheme, this has potential for provision of alternative community facilities or income generation through redevelopment. This may be most relevant for early phases of Lodge Hill, where properties are occupied before all the on-site facilities are provided and there may be greater requirements for off-site car travel than once Lodge Hill is established.
- 5.67 A car club should be strongly promoted as part of the Green Travel Plan for Lodge Hill. It is one of the most realistic ways of reducing car ownership and is therefore an integral part of any strategy proposing limited parking provision. Car club members have access to a car when they need one but are not so likely to use one for trips where there is an alternative. It can be particularly useful in reducing second (or subsequent) car ownership.

T20 ➔ A car club should be provided to encourage reduced car ownership, and incentives provided to encourage new residents and businesses to make use of it.

6

Chapter six

Character

- 6.1 Large-scale developments, like a new settlement, can risk appearing sterile and artificial. Everything is new and the place as a whole is much more planned than in a traditional town or neighbourhood that has grown up over a much longer period of time. However, a sense of place is a key factor that influences quality of life for residents. The character of a place can facilitate or stifle the creation of an active, inclusive, well-functioning community.
- 6.2 The challenge for Lodge Hill is to create a sense of place so that it will function not only in 15-20 years time when the development is first completed, but also well into the future. It can achieve this by:
- capitalising on and responding to its rural setting;
 - retaining key heritage assets and reflecting the site's history;
 - making use of existing buildings and landscape features;
 - integrating with the existing development and community at Chattenden;
 - requiring a high quality of design throughout;
 - enabling a variety of built forms and layouts to be incorporated into an integrated whole place.

Countryside issues

- 6.3 Lodge Hill cannot and should not be separated from its context. It is bordered on most sides by undeveloped, rural areas. There is a mixture of agricultural, leisure use and woodland, which all adds to an exceptional setting for the site. This is a major asset for the development. It gives a strong foundation on which to establish a sense of place. It can also be a marketing tool for future developers; it is in their interests to develop and enhance this character.
- 6.4 While the rural setting is an asset for the development, it can also be sensitive to change. Lodge Hill is a large-scale development, much larger than anything that currently exists on the Peninsula. Some existing residents have expressed concern that it will change the character of the surrounding area so that it no longer has a rural feel. However, if the development is sensitively handled, this can be avoided. In other parts of Kent and further afield, it is common to find small market towns serving a surrounding area which retains its rural character. It is a very flexible model that can respond to local context and Lodge Hill should follow this approach.

CH1 ➔ Lodge Hill should be integrated into its context. Its built form, layout and scale should respond to, support and strengthen the rural character of the surrounding area and smaller settlements.

- 6.5 The strategic allocation for Lodge Hill includes some of the surrounding areas including part of the Chattenden Woods SSSI. The developable area is smaller (see Figure 1.1). Much of the developable area is in the valley between Chattenden and Deangate Ridges. This has limited visibility from outside the site. The Chattenden Barracks area is more visible. There is also a small corner of the site to the northeast that slopes down towards High Halstow and is visible from the village, Dux Court Road and nearby footpaths. Figure 6.1 shows the most visible areas of the site and where the main views of these arise.

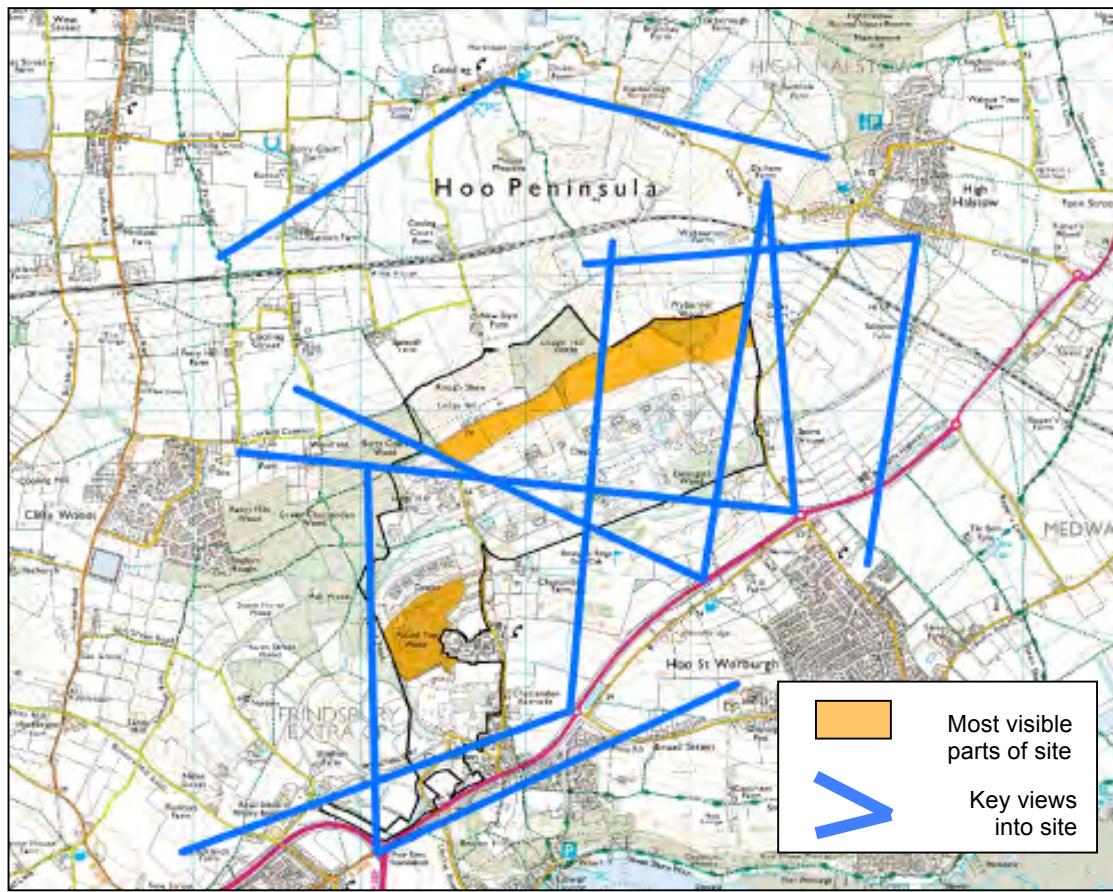


Figure 6.1: Key views and visibility

- 6.6 Chattenden Ridge is an extremely important feature. From the ridge, there are dramatic views over the Peninsula, the Thames estuary and Medway. It forms part of the ridge at the heart of the Peninsula, one of its defining landscape features, and is very prominent from nearby settlements, transport corridors and the footpath network.



Figure 6.2: View from Chattenden Ridge

- 6.7 The main built area of Lodge Hill should not intrude on views of the ridge. The broad developable area shown in the Core Strategy Concept Plan must be refined through detailed analysis of topography and viewpoints to accomplish this. It may be acceptable to have some small-scale development on or close to the ridge, where it is an appropriate use for the area. A visitor centre by the anti-aircraft station, or facilities supporting provision of a countryside park, are possible examples. If this is proposed, their position, scale and design must be very carefully considered.

CH2 ➔ The main built area of the settlement should be set back from Chattenden Ridge so that it does not disrupt this strong landscape feature. Any small-scale development proposed on or close to the ridge will only be acceptable if there are clear benefits to its location here. In this circumstance its siting, scale and design must not detract from the contribution of the ridge to the wider landscape.

- 6.8 Views from the ridge should also be retained. They would be a great attraction for any proposed park. However, there are benefits to reconnecting the existing woodlands along the ridge. This would reinforce it as a strong feature for the Peninsula and have ecology benefits. Where this is proposed, planting should be located to retain access and views at strategic locations.
- 6.9 Another sensitive area is to the west of Chattenden. The land here slopes down towards Wainscott and the main urban area. The separation between urban Medway and Lodge Hill is less than 550m at its smallest and will also include the main western access roads. The distance from the urban edge to the likely location of access from Four Elms Hill is just over 400m.
- 6.10 The Local Plan designated this area as an Area of Local Landscape Importance (ALLI). It is not proposed to retain these designations in the Core Strategy. Instead, a criteria-based assessment is proposed. The Council has therefore carried out a Landscape Character Assessment (LCA) for the whole of Medway. The gap between Lodge Hill and urban Medway includes Bald Top Hill (character area 19) and part of Hogmarsh Valley (character area 18).

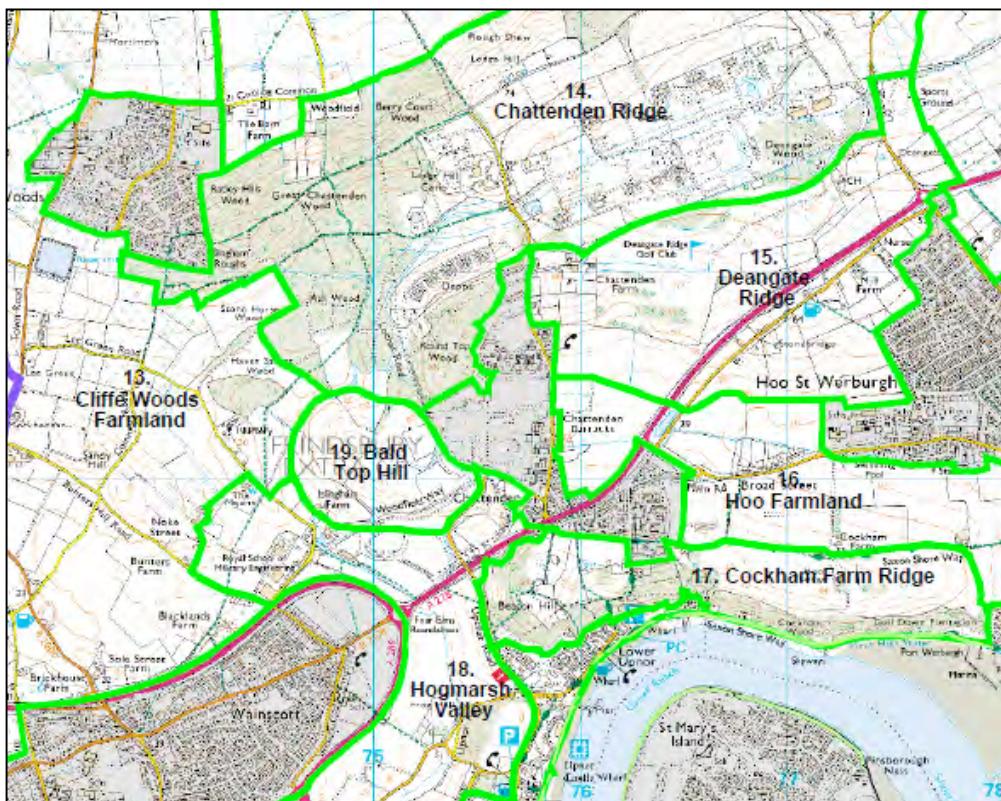


Figure 6.3: Extract from LCA map



Figure 6.4: Bald Top Hill, Round Top Wood and Hogmarsh Valley

- 6.11 The continued integrity and openness of this gap is crucial. It is what makes Lodge Hill being part of the rural Peninsula and not an extension of urban Medway. Where new development borders this area, a robust landscape buffer must be created. This should aim to ensure that the character of the area remains green, rural and distinct. It may involve significant woodland style planting and strengthening of some existing plant lines. The exact location of the development edge and landscape buffer should be determined by a thorough visual impact assessment. Detailed proposals should be guided by the information within the LCA, as summarised in Box 6.1.

Hogmarsh Valley:

- A green buffer and backdrop and distinctive gateway to the Medway towns.
- Contains a number of detracting features including transport corridors, MOD facilities and sewage works. Together with influence of urban fringe this disrupts the overall integrity of the area.
- Recommend strengthening of landscape character through additional planting, softening of urban fringes, provision of more sympathetic boundary treatment and repairing historic field patterns.
- Protect openness and views of wooded backdrop.

Bald Top Hill:

- Distinctive and prominent landscape feature in views from Wainscott and the A289.
- Tranquil and unspoilt rural character but under threat from expansion requirements of retained MOD estates.
- Character and views must be protected from intrusion as part of surrounding development proposals.
- Improve screening to military areas, strengthen woodland edges on upper slopes, investigate potential for footpath to take advantage of views from hilltop.

Box 6.1: Summary of relevant LCA conclusions

CH3 ➔ A robust buffer should be created at the western edge of the site to screen the new development from urban Medway and in views from the A289. Its objective is to maintain and enhance the integrity of the existing green separation between the site and the urban area.

- 6.12 Views from the A228 at Four Elms Hill are less sensitive. Chattenden Woods SSSI and other un-developable areas will provide a green backdrop to Lodge Hill. It is inevitable that some development will be seen from Four Elms Hill, as indeed the existing Chattenden village is. The beginning of the existing development is a good marker for where visibility becomes less of an issue. A gentle transition should be provided between the countryside and Lodge Hill.

- 6.13 Consultation for the Core Strategy included a workshop on issues for the Peninsula. This identified Hogmarsh Valley (including Bald Top Hill) as a key concern, due to existing pressures on the area and impact from future development. It was also agreed that the area has great potential and its gateway function was recognised. Participants felt that better awareness and stewardship of this area was needed.
- 6.14 A countryside management plan for this area would help to identify priorities and ways to achieve them. The landowner (currently the MOD) would need to be involved. The council will support local stakeholders should they wish to progress this. The developer(s) of Lodge Hill will be expected to participate, and to link any landscape or ecological mitigation in this area to the plan.
- 6.15 Any Trust set up for Lodge Hill should also participate. This would be an ideal opportunity for them to build relationships with surrounding communities.
- 6.16 Funding is likely to be an issue in the current economic climate. Working with the landowner(s) should help to identify low-cost measures that bring large gains. S.106 contributions from Lodge Hill may also be an option. These can only be required if they are directly related to the development and its impact. However, it is likely that relevant contributions towards off-site works will be required for access improvements, ecological mitigation, etc.

CH4 ➔ The council will encourage and support the production of a countryside management plan for the Hogmarsh Valley area, to respond to pressures from existing and future development. This will need to involve a wide range of local stakeholders. The developer(s) of and any community organisation at Lodge Hill will be expected to participate.

- 6.17 The gap between Lodge Hill and urban Medway includes a small group of houses close to Chattenden, between the two arms of the proposed main access. The easternmost house is Bridge Lodge and there is a small field to the rear. The total area is approximately 2.8 hectares. The owners of this land have responded to various Core Strategy consultations, suggesting that it should be included in the strategic allocation.

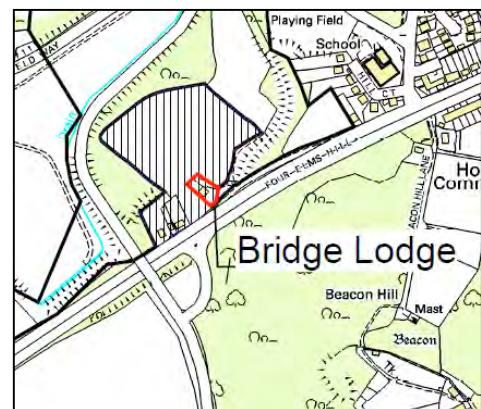


Figure 6.5: Bridge Lodge and environs

- 6.18 This is not appropriate because the land is not necessary to meet the Core Strategy's objectives or to deliver Lodge Hill. However, it shows that the landowner is considering development of this area, so there is a chance that proposals may come forward separately. The sensitivity of the gap between Lodge Hill and urban Medway means that any development potential here is very limited. Bridge Lodge and associated land are within the boundary of the Development Brief, so policies set out above would apply to this site just as they do to Lodge Hill itself.
- 6.19 The gap between Lodge Hill and High Halstow is also narrow; 800m at its smallest. The topography here is very different to the Hogmarsh Valley but this edge of the site does have some areas that are visible from the

surroundings, including the village of High Halstow. It falls within Character Area 14 of the LCA: Chattenden Ridge. A visual impact assessment will be required in support of any planning applications for this part of the site to determine the exact areas of sensitivity and the most appropriate responses, including the need for visual screening at key points.

- 6.20 The gap is also important to preserve the separate identity of High Halstow and prevent the risk of future merging with Lodge Hill. Maintaining these separations to nearby settlements is one of the guidelines set by the LCA.
- 6.21 The easiest way to accomplish this would be to limit the visibility of this area from Dux Court Road. Development should be set back from the site edge here and should be low height and low density, incorporating significant landscaping. Again this will need to be guided by a detailed Landscape and Visual Impact Assessment. Woodland style planting to the edges of this area may again be appropriate to help reinforce the rural feel of the area.

CH5 ➔ The visibility of Lodge Hill from Dux Court Lane and High Halstow should be limited as far as possible, and the rural character of this edge of the site should be retained.

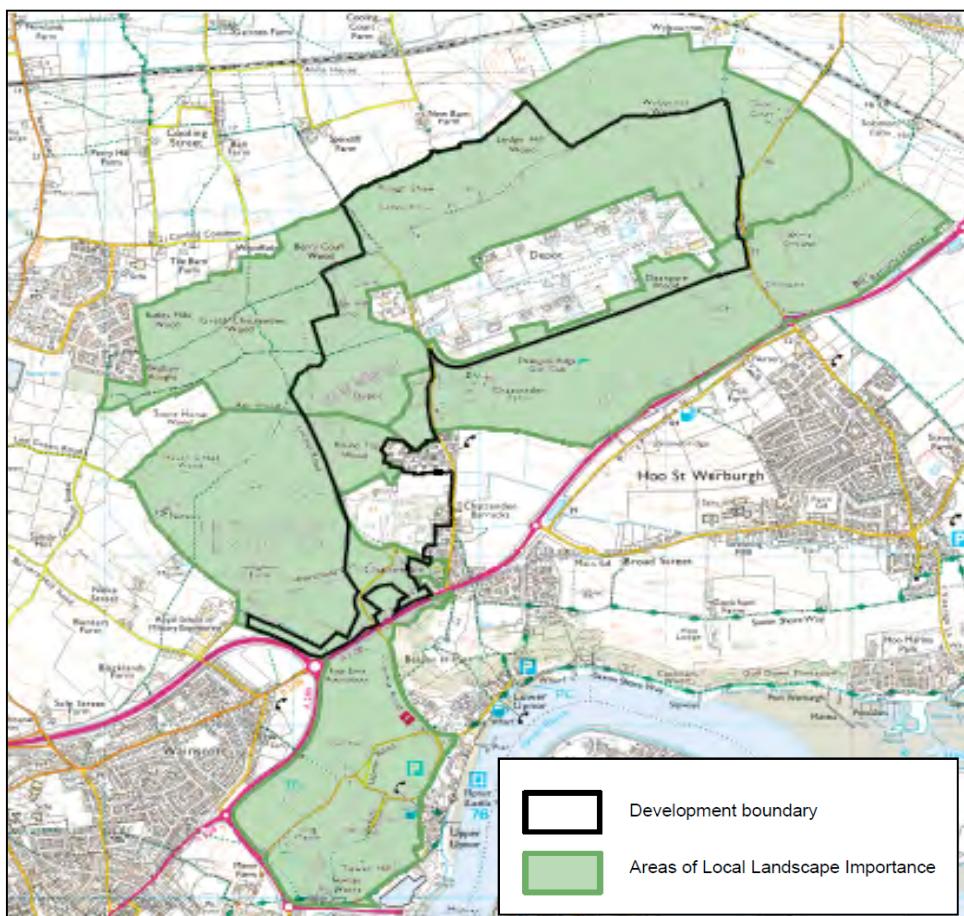


Figure 6.6: ALLI designations at Lodge Hill

- 6.22 A large part of the site itself is covered by an ALLI designation in the Local Plan. The allocation of Lodge Hill as part of the Core Strategy will supersede

this. Even within the Local Plan, much of the ALLI designation overlaps with the strategic policy safeguarding the MOD estate for future development.

- 6.23 This does not reduce the importance of protecting landscape character. There is no presumption that the whole allocated area can or should be built on.
- 6.24 It is inevitable that the allocation of Lodge Hill for development will change the character of the site. Detailed analysis of the areas affected will make it easier to manage this change. The LCA started this process. The landscape and visual impact assessment to be carried out for the outline application and detailed design work should continue and refine it. The focus should be on identifying and protecting the most important characteristics of each part of the site, whether designated as an ALLI or not. There are likely to be some areas where landscape and ecology are more sensitive and development must therefore be more tightly controlled.

Landscape strategy

- 6.25 The landscape strategy for Lodge Hill should acknowledge the contribution of the rural setting to its character. It should facilitate strong visual, conceptual and functional links between Lodge Hill and the countryside. Although most of the site is previously developed, there are many existing natural features. The strongest existing features are identified below. The developer should retain these and integrate them into a landscape strategy for the site.
 - Ancient woodland within the SSSI and at Deangate Wood, Wybornes Wood and Round Top Wood.
 - Groups of Category A trees, including Rams Bottom Wood.
 - Shelterbelts running from Chattenden Ridge into the valley.
 - The line of trees and vegetation following the security fence.
 - The watercourses at the valley bottom, including a number of ponds and small lakes.
- 6.26 These retained features, combined with the buffer zone for the SSSI, create a strong framework for a green grid across the site (see Figure 6.7). This also makes a very strong connection to the surrounding countryside. The landscape strategy for Lodge Hill should take this grid as a starting point.
- 6.27 The grid informed by these features will have a clear influence on the form of the settlement. It will be a major factor in establishing a sense of place for Lodge Hill. As such, proposals for the site-wide landscape framework should form part of any outline planning application. The major landscape elements will need to be coherent and integrated even if the detailed design and delivery is carried out in phases. Sufficient detail must be provided at outline application stage to ensure that this is achievable.

CH6 ➔ A site-wide landscape strategy to guide future public realm and infrastructure proposals should form part of any outline planning application. This should include a site-wide landscape network building on the grid formed by existing major landscape features shown in Figure 6.7, which should be integrated into the settlement as a whole. It should also provide guidelines on the distribution of uses within the open space, including formal sports, formal and informal amenity areas and natural or semi-natural open space.

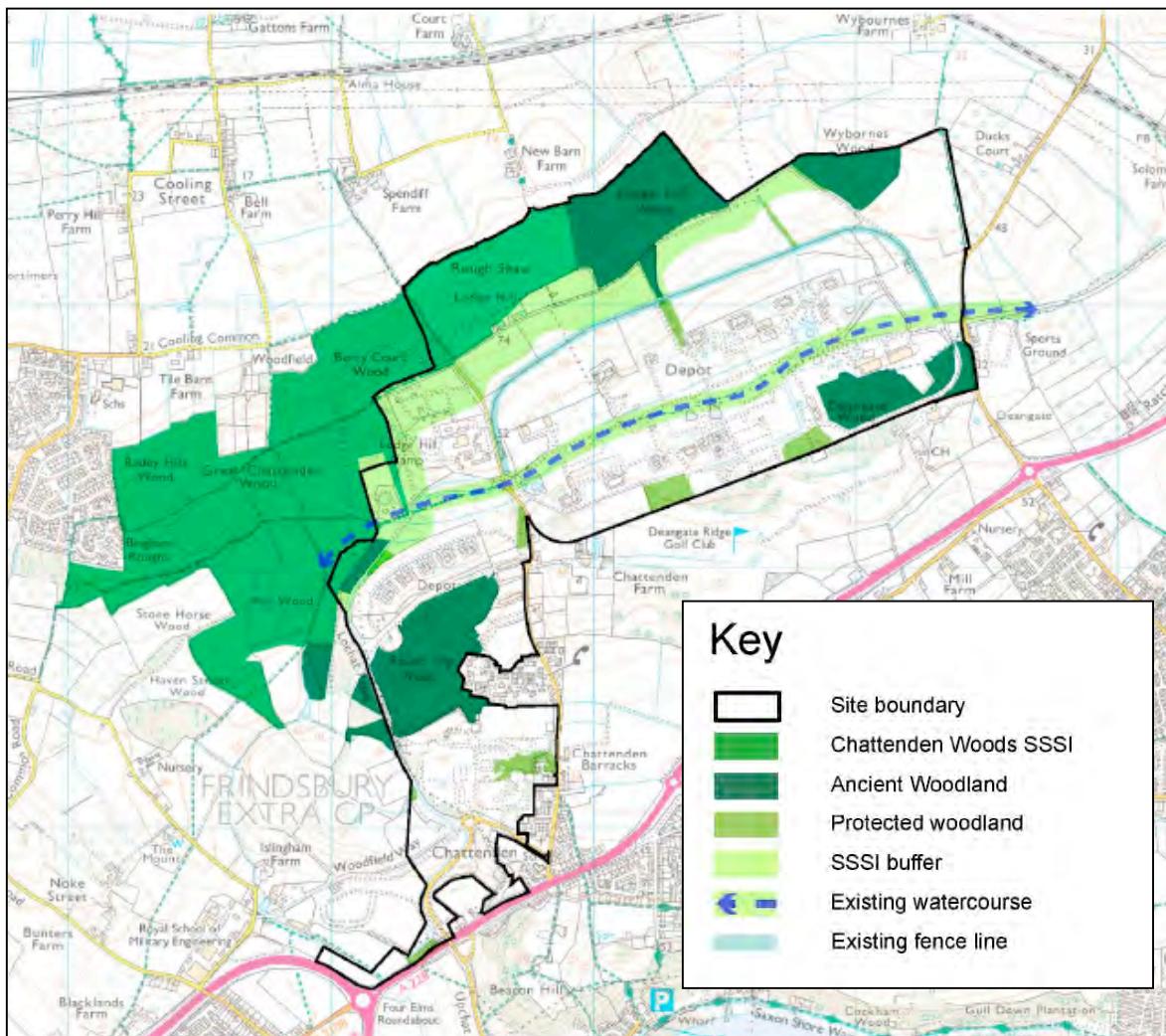


Figure 6.7: Framework green grid

- 6.28 The large-scale and significant landscape features forming the framework of the green grid are not the only existing features on site. Smaller tree groups, groups of Category B trees, individual specimen trees and smaller ponds, for example, all add to the character of the place. Considering every one of these will be too much detail for the outline application stage. However, site-wide remediation, earthworks and infrastructure works could affect whether retention of individual features is possible.

CH7 ➔ Site-wide remediation, infrastructure and earthworks required in advance of the detailed design stage should avoid impact on existing trees and landscape features as far as possible. Where it is not possible, they should demonstrate that impact has been minimised as much as is practical, or that the features affected are of limited significance to the character and form of the overall development.

- 6.29 Detailed design for development parcels should consider existing landscape features on that parcel. Where possible they should be retained and integrated into the layout of the scheme. The green grid should be linked into all development areas. Species selection for landscaping schemes should reflect the local landscape and should contribute to biodiversity aims.

- 6.30 The principles set at outline stage will direct landscape design for individual development parcels. However, there should still be scope for variety to prevent all parts of the site from looking the same. The use of the landscape strategy to set character areas within the site where different principles should apply will help to strike the balance between variety and incoherence.

CH8 → Landscape design for individual development parcels should retain and integrate existing landscape features wherever possible, and link to the green grid established at outline stage. It should contribute to local distinctiveness and to biodiversity retention and enhancement.

- 6.31 A lighting strategy for all public spaces across the site (including roads and footpaths) will also be required. This has strong links to the landscape strategy and will need to address the following issues:
- Public and highway safety.
 - Impacts on ecology.
 - Landscape character and design implications.

CH9 → A coherent and consistent lighting strategy for public spaces and routes across the site should be submitted following the landscape strategy agreed at outline planning application stage.

- 6.32 The landscape strategy for the site should include a public art strategy. This should take a holistic approach exploring how public art can be incorporated into the design of open spaces, building detailing and urban form. This will contribute richness and depth to Lodge Hill's sense of place, giving its new community a cultural identity as well as a visual one. The heritage of Lodge Hill should be seen as a source of inspiration for this public art strategy.



Figure 6.8: Public art

- 6.33 There will be a place for sculptural public art in the strategy. Developers should consider the potential for a small number of landmark features in key locations. The locations should be carefully chosen so that the landmark feature does not overwhelm them. Some options to consider may include:
- town centre/town square;
 - anti-aircraft station on Chattenden Ridge (see heritage section);
 - key entrance points to the development;
 - secondary school.
- 6.34 The public art strategy should consider community engagement. There are many options for this. It could involve direct participation in design workshops; a competition with local representatives on the judging panel; or a public vote on shortlisted proposals. It may even be possible to give any Trust a commissioning role for some projects.

CH10 ➔ A public art strategy for Lodge Hill will be required. This should take a holistic approach to inclusion of public art, outline a mechanism for community involvement, consider the potential for landmark public art at key locations and draw on the site's heritage. At outline planning application stage, the broad principles and key landmark locations should be established.

Heritage

- 6.35 Parts of Lodge Hill have been in military use since the late 19th century, as part of a network of military installations and infrastructure within Medway (see Fig 6.9). Its early functions were for munitions storage and manufacture. This has left a substantial legacy of military heritage. As well as surviving buildings and structures, traces of other historic features can be found on site. The layout and organisation of the site also reflects its military use. In addition, there are records of buildings, structures and other features that have since been demolished or lost.
- 6.36 This legacy is a fantastic resource for the site. It has significant value in its own right. A number of the existing buildings and structures may be of national importance; some are already listed. This history and local cultural identity can do more for sense of place than any artificial alternative. It is vital that Lodge Hill's heritage is reflected in its masterplan and detailed design.
- 6.37 The most obvious way to integrate heritage into a new development is through the retention and reuse of buildings and other features. For any assets that are listed or scheduled, the council will expect their retention.
- 6.38 Buildings without such obvious significance can still be worthy of retention. They add to local distinctiveness and variety, and counter the tendency of large developments to seem artificial. There are also sustainability benefits. A supply of older (and often cheaper) buildings can also be very useful for some business and community uses. For this reason, consideration should also be given to temporary use of buildings that are not to be retained long term.

CH11 ➔ Subject to structural condition and the need to meet other objectives, existing buildings and structures on site should be retained and incorporated into future proposals where they are significant in terms of the site's heritage or their architectural merit, or where they would contribute positively to the character of the new development.

- 6.39 Figure 6.10 summarises the location of buildings and structures on site that may be worthy of retention. Further details are available in Appendix 3. In most cases, little or no information is available about their structural condition. It may be that this is the key driver for which can be retained.
- 6.40 The pillboxes and other defence structures are important not only as part of the site's heritage but in linking it to the wider context of defence infrastructure in the local area. English Heritage has listed four WWI sentry boxes and is still considering a number of other structures in this group. Every possible effort should be made to retain these structures. This may require restoration works in some cases. Proposals for their demolition will only be accepted in exceptional circumstances. For the most important examples, including any that are listed, consideration will also have to be given to their setting.

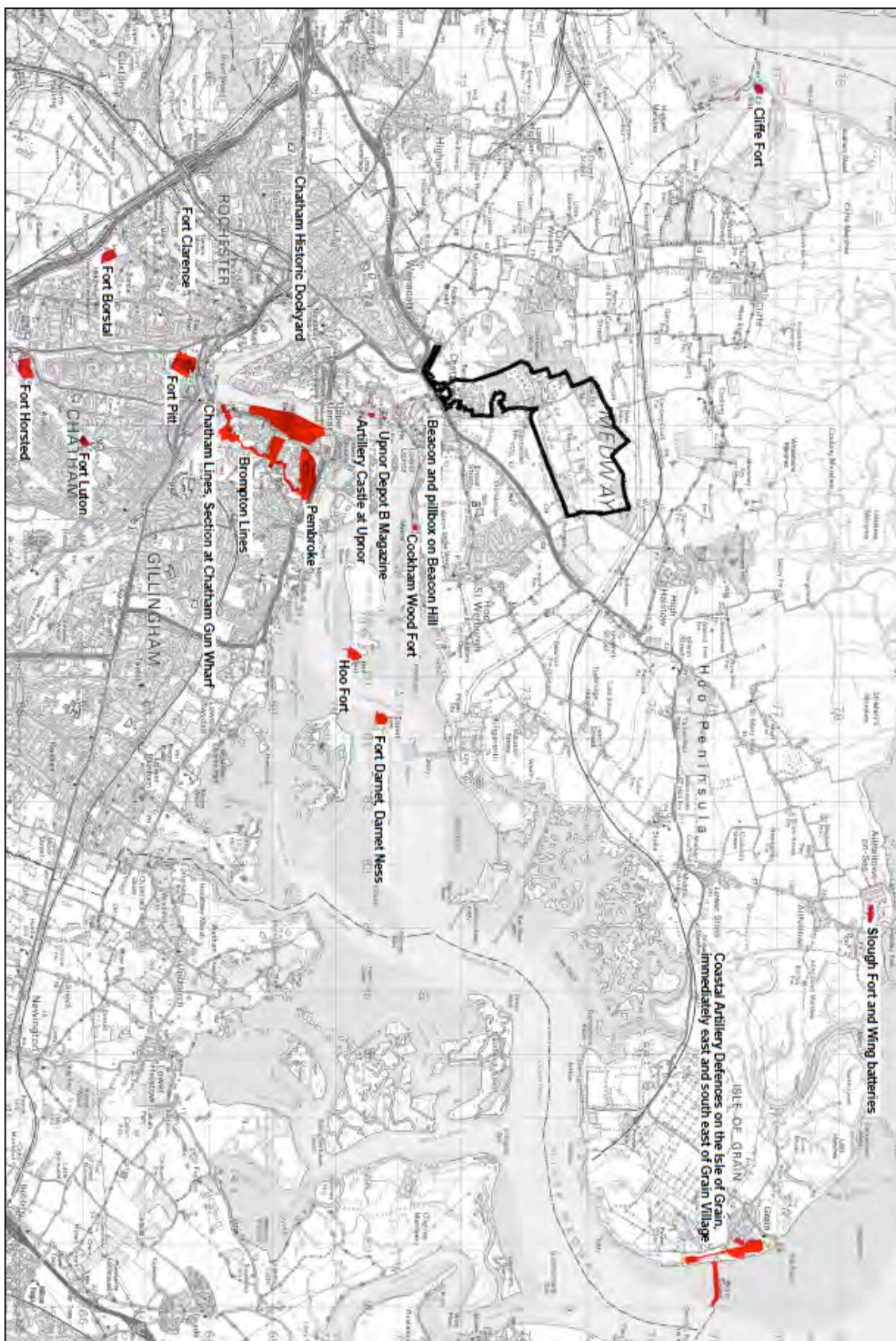


Figure 6.9: Lodge Hill in context – Medway's military heritage

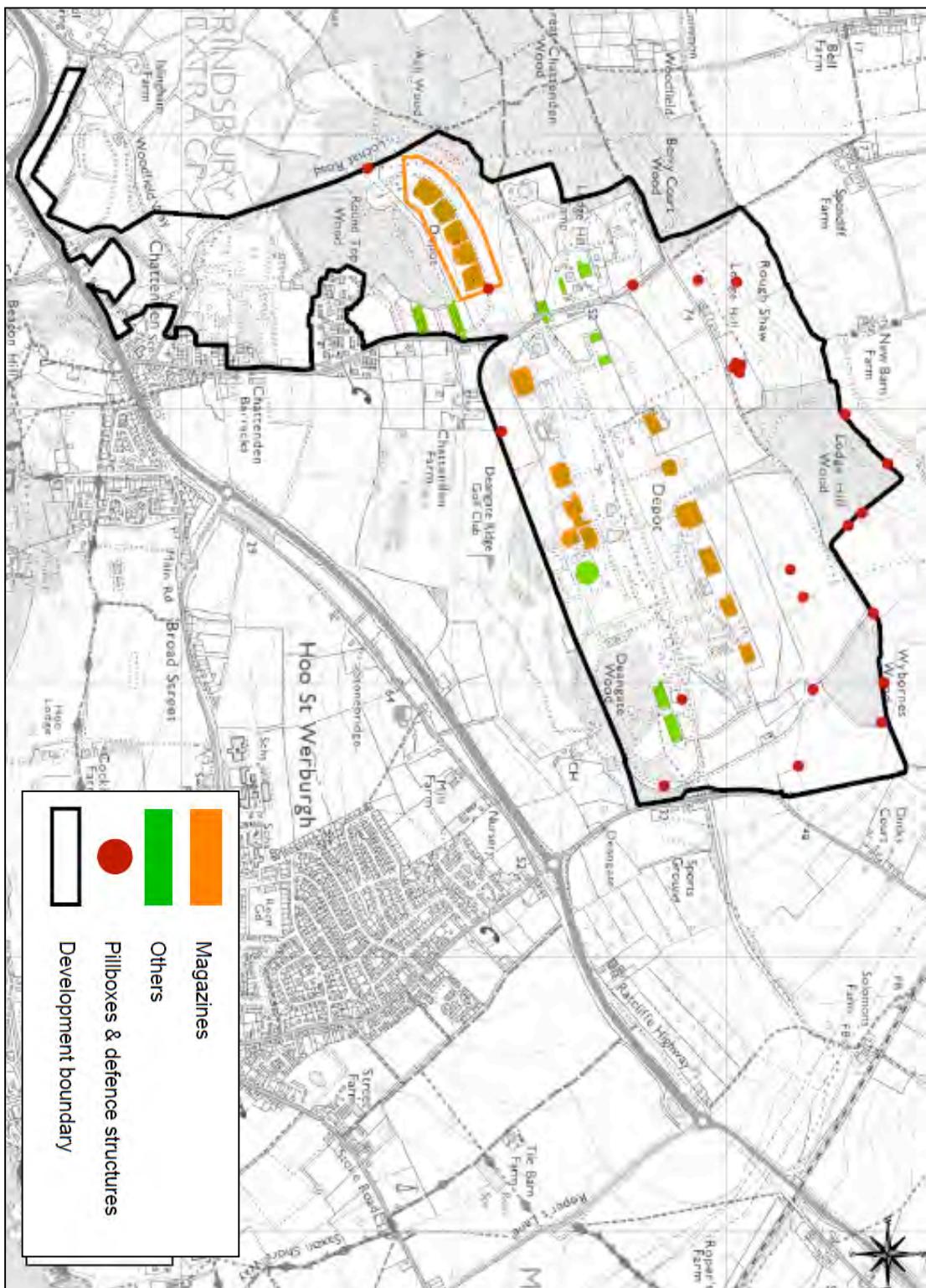


Figure 6.10: Heritage assets and other buildings that may be worthy of retention (see also Appendix 3)

- 6.41 The magazine sheds and their embankments are significant at a local level. They are the main remnant of the original establishment at Lodge Hill. The group of five Chattenden Magazines within a walled enclosure, and the "Expense Magazines" are particularly interesting examples. However, many of the sheds themselves are in poor condition and have been much altered. English Heritage have reviewed the magazines and confirmed that none of them are to be listed. Consideration should still be given to retaining and re-using one or two of the best examples, as they are a key element of the history of Lodge Hill.
- 6.42 The placement of the magazines has had a major influence on the layout and use of the site over the years. Whether or not the sheds are retained, their siting should be reflected in the proposed layouts. This should include the embankments around each shed, which were to contain any explosions from the munitions stored there.
- 6.43 The history of military use of the site should also be reflected through the site's layout, where possible. It is common for military sites to be laid out to a regular grid. At Lodge Hill, this is clearly shown by the route of the narrow gauge railway that linked the magazines to Upnor depot. The track itself has long been removed but internal routes still follow the same lines. A grid-style layout for the whole development would therefore reflect its military heritage. This will need some flexibility, in particular to accommodate difficult topography or retained features. The route of the railway could be reflected specifically. It may be possible to continue reference to the railway in any walking and cycling link between the site and Upnor.
- 6.44 The allocated site includes land that is used by the MOD but is not within the security fence. The line of the fence should be reflected in proposals for the site to reflect the extent of military occupation of the site. As the line of the fence corresponds with a strong line of vegetation for much of its length, it may be possible to make a feature of this.
- 6.45 The other buildings shown on figure 6.10 have not had such a strong influence on its development and use, but still reflect the site's history and provenance. They have mainly been selected because of their possible contribution to the character of Lodge Hill as a place. Proposals should retain these buildings where possible. In many cases this will require alterations or extensions. Developers should consider less conventional uses as a way of retaining some of these buildings. There are examples elsewhere of character buildings being saved by innovative thinking about what they can be used for.
- 6.46 In some cases, the significance of a feature is not obvious to those without prior knowledge of it. For example, the anti-aircraft station at Chattenden Ridge is believed to be the first in Britain, together with its sister station at Beacon Hill. The purpose of the pillboxes defending the stopline is also unclear at first impression.



Figure 6.11: Chattenden Ridge anti-aircraft station

The developer will be expected to make provision for interpretation of heritage features. This would benefit from being incorporated into the landscape and public art strategies.

CH11 ➔ The military heritage of Lodge Hill should be reflected in the layout and landscaping of development proposals. Consideration should also be given to the need for interpretation of key heritage features.

Built development

- 6.47 The built form of the development is where the need to balance variety and coherence becomes strongest. The emphasis on family housing does not mean that Lodge Hill should be built out in uniform suburban style. It must have a character of its own, as an entire place. There must be a recognisable core, areas of different character and edges that relate to the surrounding countryside.
- 6.48 This can be achieved through a hierarchy of streets, public spaces and densities, as is common in traditional settlements. Each area within this hierarchy (centre, suburbs, local hubs etc.) should have a distinct character.
- 6.49 The town centre is the heart of any place. Its location and design should enable this role. There are a number of factors that suggest that it should be located towards the bottom of the main valley:
- The flatter topography here is better suited for the large buildings that would be found in the town centre, such as a foodstore. Taller buildings (for higher densities and mixed use) can also be accommodated here without intruding on the ridgeline.
 - The watercourse running through the valley can enliven and add character to a town square or green.
 - It enables more properties to be within easy walking distance.
 - It can be better located in relation to the road access for the rest of the Peninsula.
 - The levels of activity that would be generated by the town centre need to be located away from the sensitive ecology areas around the SSSI.
 - It would place the town centre literally at the heart of the development.
- 6.50 The town centre should be a vibrant, welcoming place. The mix of uses set out in Chapters 2 and 3 will help to accomplish this but design will also play a big role. The town centre will be the main focus point for visitors from the rest of the Peninsula and will play a significant part in the lives of people moving there. It will therefore be important in setting the character for Lodge Hill as a whole. Key principles for the town centre to follow are set out in Box 6.2
- 6.51 Traditional town centres have a key navigational point in the form of a parish church, town hall or similar building. These also function as meeting places for the local community and contribute to local cultural identity. Something must take the same function for Lodge Hill. At least one landmark building should be provided, but the form and use that this should take is flexible. It should be distinctive to Lodge Hill, and a pastiche of traditional building types is unlikely to be acceptable.

- The town centre should connect with the green spine and watercourse in the valley.
- A town square should be created to enable markets and other public events. It should be of sufficient scale to give it a sense of being a destination.
- A High street should be created to provide movement (including buses) through the town centre to promote vitality, but should not carry heavy traffic.
- Buildings in the town centre should be of sufficient scale to provide a sense of definition and enclosure to streets and spaces. They will generally be at least three storeys but could be higher subject to suitable design.
- The town centre should be a mixed-use environment including retail, community facilities and business uses. This should also include some provision of residential to ensure that the town centre has activity and natural surveillance throughout the day.
- Food and drink uses should be located where they can make use of outside seating areas and views of key landscape features.
- The supermarket must be well integrated into the built form of and layout of the town enabling easy transition between them.
- A landmark building should be provided for sense of place and navigation, and there is potential for landmark public art to be included.

Box 6.2: Key principles for town centre

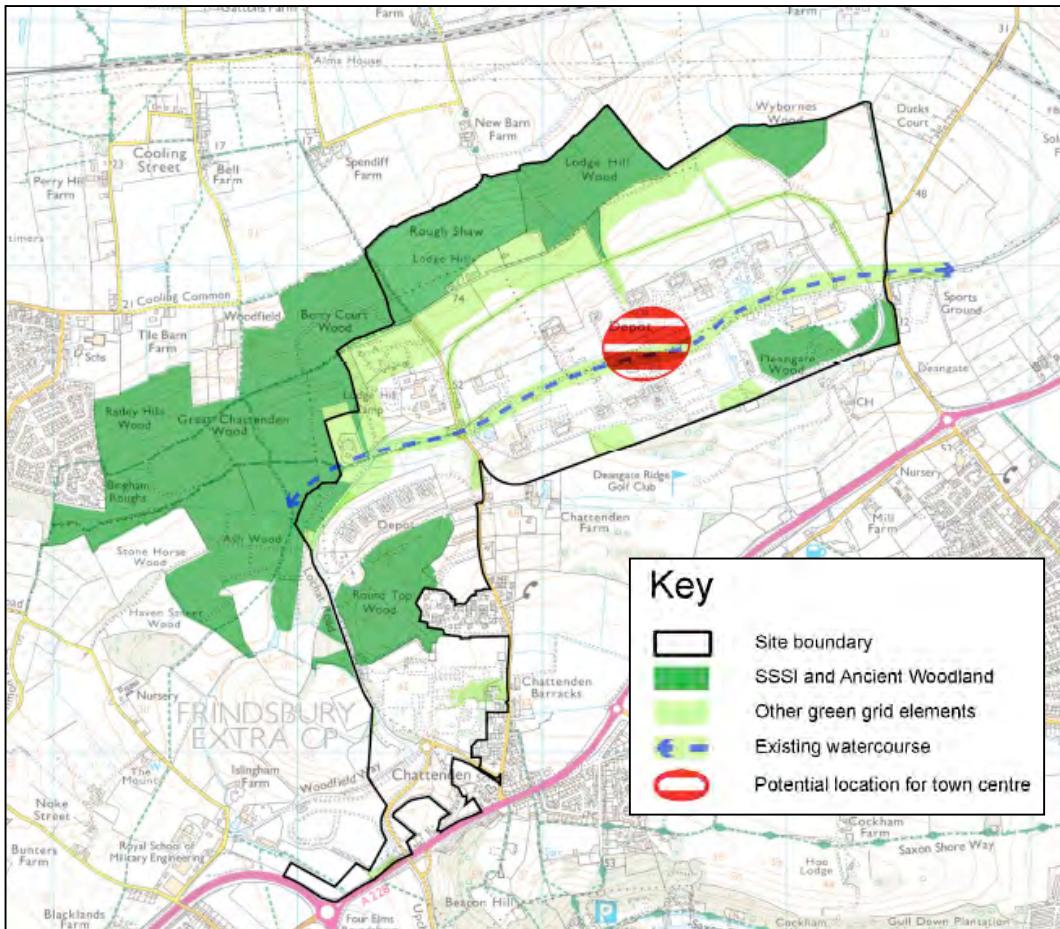


Figure 6.12: Suggested location for town centre

CH12 ➔ The town centre should be located within the main valley in a position that enables it to act as the heart of the settlement. Proposals for the town centre should follow the principles set out in Box 6.2.

- 6.52 Chapter 2 (Community) stated that as many properties as possible should be within ten minutes walking distance of their nearest hub.
- 6.53 The local hubs need to be welcoming and useable. Primary schools can provide community uses. Public spaces should be provided at each hub. This could be smaller and more informal than in the town centre, similar to a village green, and should include some form of play area. A green space also creates opportunities for food and drink uses like the traditional village pub. A lesser scale of buildings than in the main centre will be required but the hubs should still have a presence and identity beyond that of their residential areas.

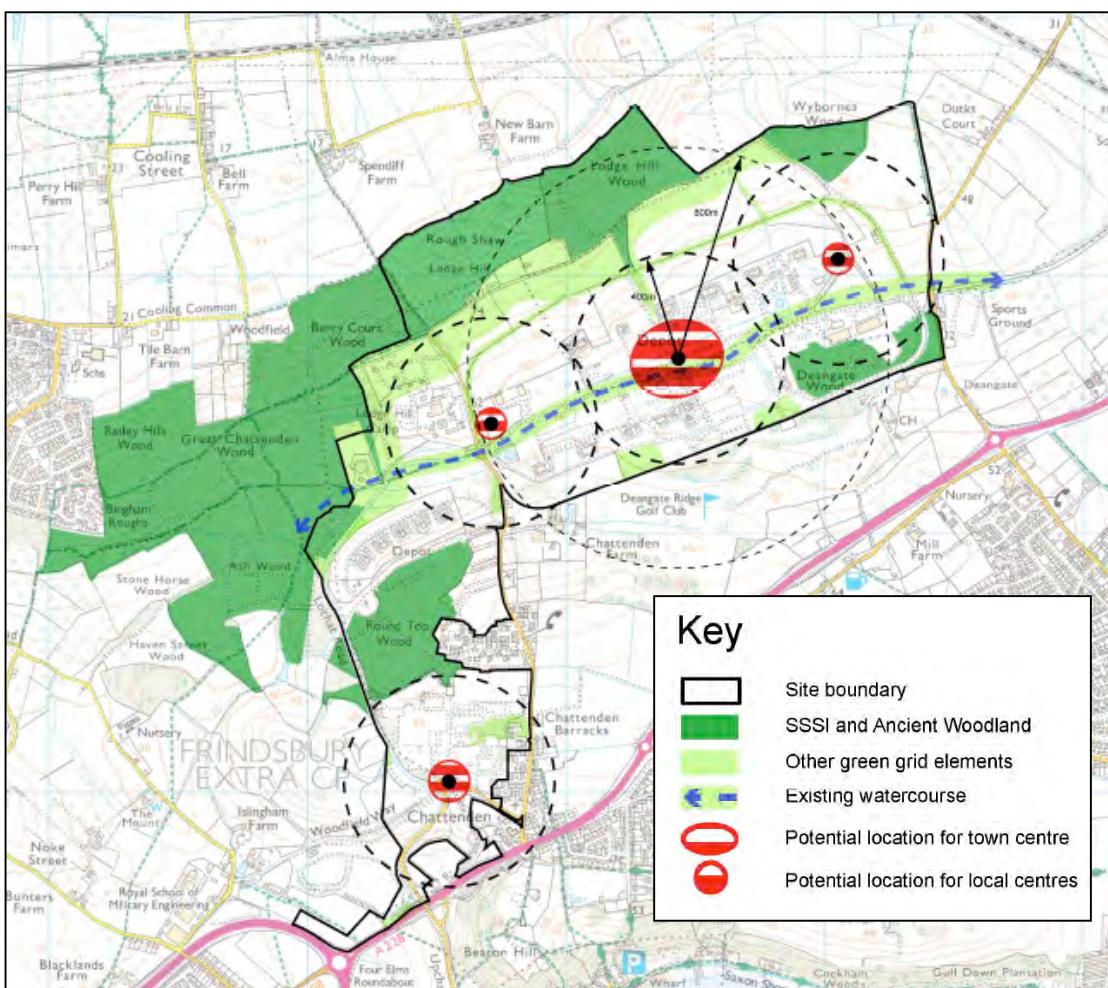


Figure 6.13: Local hubs

- 6.54 The hub at Chattenden should be of slightly larger scale than the other local hubs. This should be reflected in the design of its buildings and spaces.

CH13 ➔ Local hubs should provide useable and welcoming environments including areas of public space. While they should complement the surrounding residential areas they should have a distinct character that reinforces their role.

- 6.55 The siting of the main and local hubs gives a recognisable core to the main valley. Concentrating higher density residential development around mixed-use areas has a number of benefits:
- Maximises the number of residents within walking distance of facilities.
 - Helps maintain activity during evenings and weekends, providing a sense of safety for users of the area.
 - Supports viability of town-centre uses, as a ready-made catchment.
 - Helps to support viability of public transport by providing a concentration of residential and business customers around key routes and stops.
- 6.56 There are also good reasons for Lodge Hill to follow a traditional density gradient with lower densities at the edges. These include:
- Most edges of Lodge Hill are visually sensitive and lower density development can be easier to integrate and screen in these areas.
 - The most sensitive ecological areas are also at the site edges and would benefit from lower activity levels.
 - It is important that as many people as possible are within easy walking distance for local hubs and public transport.
 - Lodge Hill's focus on family housing means it will have a greater proportion of larger units (and plots), and the area allocated for lower density development will be relatively large.
 - The edges of the site consists includes the previously undeveloped areas and areas outside the security fence. Providing a different character to these areas helps to reflect the site's history.

CH14 ➔ Lodge Hill should include a range of densities of residential development. An acceptable range is between 15 and 85 dwellings per hectare, excluding some specialist forms of accommodation where higher densities may be reached. These figures are indicative and variations will be acceptable provided all other design objectives are met. The distribution of these densities should be broadly as shown in Figure 6.14.

- 6.57 The distribution of hubs and densities also gives a strong steer as to the location of the primary road network. Figure 6.14 shows this relationship. The road network shown follows the principles set out in Chapter 5 (Transport).
- 6.58 Higher densities do not always mean blocks of flats, although these are often a component. Areas of traditional Victorian terraces, for example, can reach densities of 100 dwellings per hectare. Some modern design has also shown that it is possible to keep the suburban qualities that people value in their housing at higher densities.
- 6.59 There is a strong link between densities and building height. Even where higher densities are achieved with houses, this tends to result in three storeys (or more) instead of two.
- 6.60 There is a place for taller buildings at key junctions or vistas in lower density areas. Equally, a three-storey dwelling in a large plot would not necessarily damage the character of a low-density countryside edge area. Feature buildings should be treated with caution. They can result in a scheme becoming disjointed if they are poorly placed or too frequent.

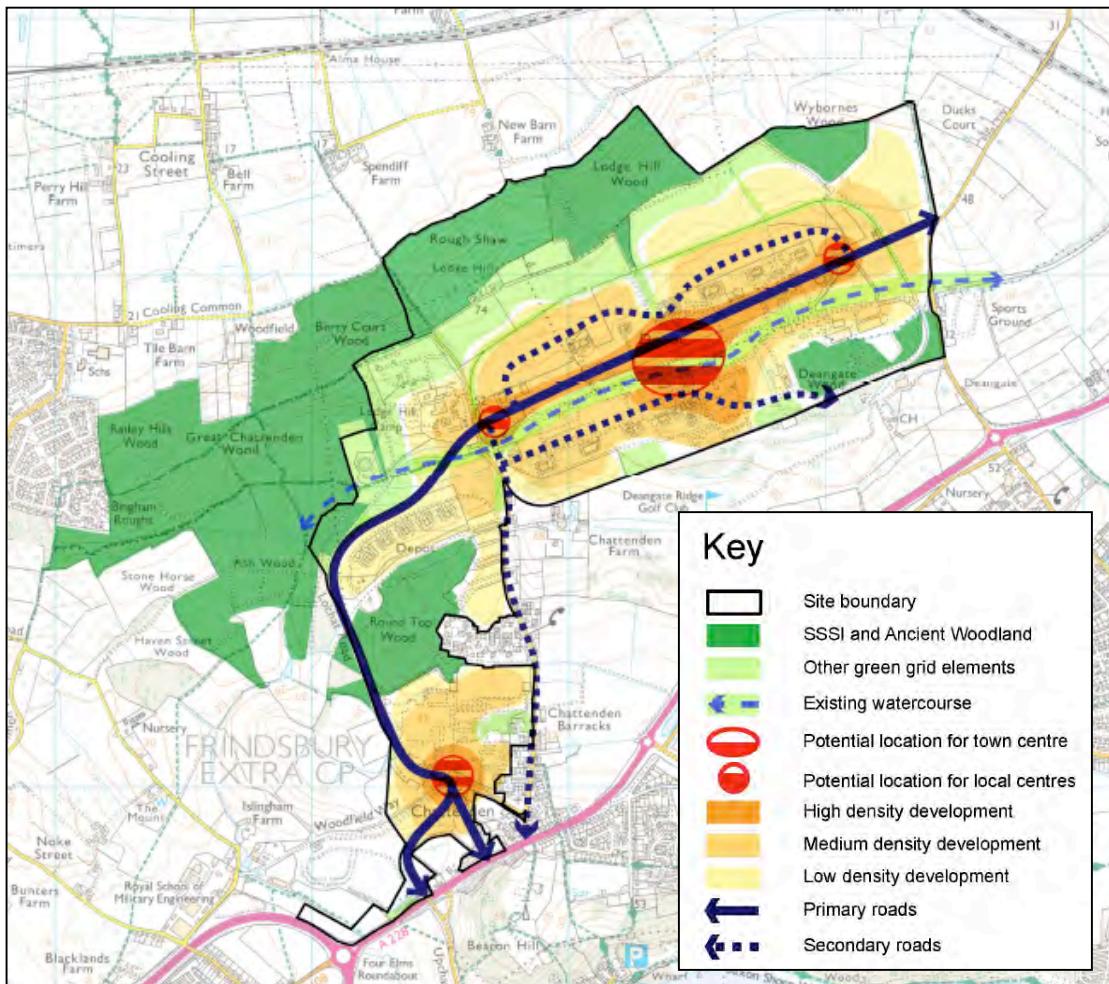


Figure 6.14: Indicative densities and road networks

- 6.61 Therefore, no maximum building heights are set for Lodge Hill. Instead, Table 6.1 gives broad guidance on the height ranges that could apply. As with density, this guidance is flexible. Variations will be acceptable as long as the overall character of a scheme remains appropriate to the area.

Area	General building height	Feature buildings
Town centre	3-4 storeys*	5 storeys
Other high density	3-4 storeys	4 storeys
Business areas	3-4 storeys	4 storeys
Medium density	2-3 storeys	3-4 storeys
Low density	1-2 storeys	2.5-3 storeys

Table 6.1: Suggested building height ranges

* A storey is taken as approximately 3.5m, measured externally

- 6.62 In mixed use and higher-density areas, higher floor to ceiling heights should be provided at ground floor. This would provide flexibility for possible future changes of use.
- 6.63 There is a general principle of frontage development wherever possible, whether facing onto internal roads, open spaces or countryside. This is for a number of reasons:

- To avoid the harsh and unattractive appearance of expanses of fencing from the public realm, especially at the edge of the development. Even well designed boundary treatment can become a problem once it starts to deteriorate or is replaced at different times and in different styles by future residents.
- To avoid pressure for future garden extensions or direct accesses being created into countryside areas or other open spaces.
- To provide overlooking and natural surveillance of these areas, especially where properties front public open spaces.
- To limit potential for dumping of rubbish from rear gardens (at countryside edges, especially where properties adjoin woodland or other vegetated areas).

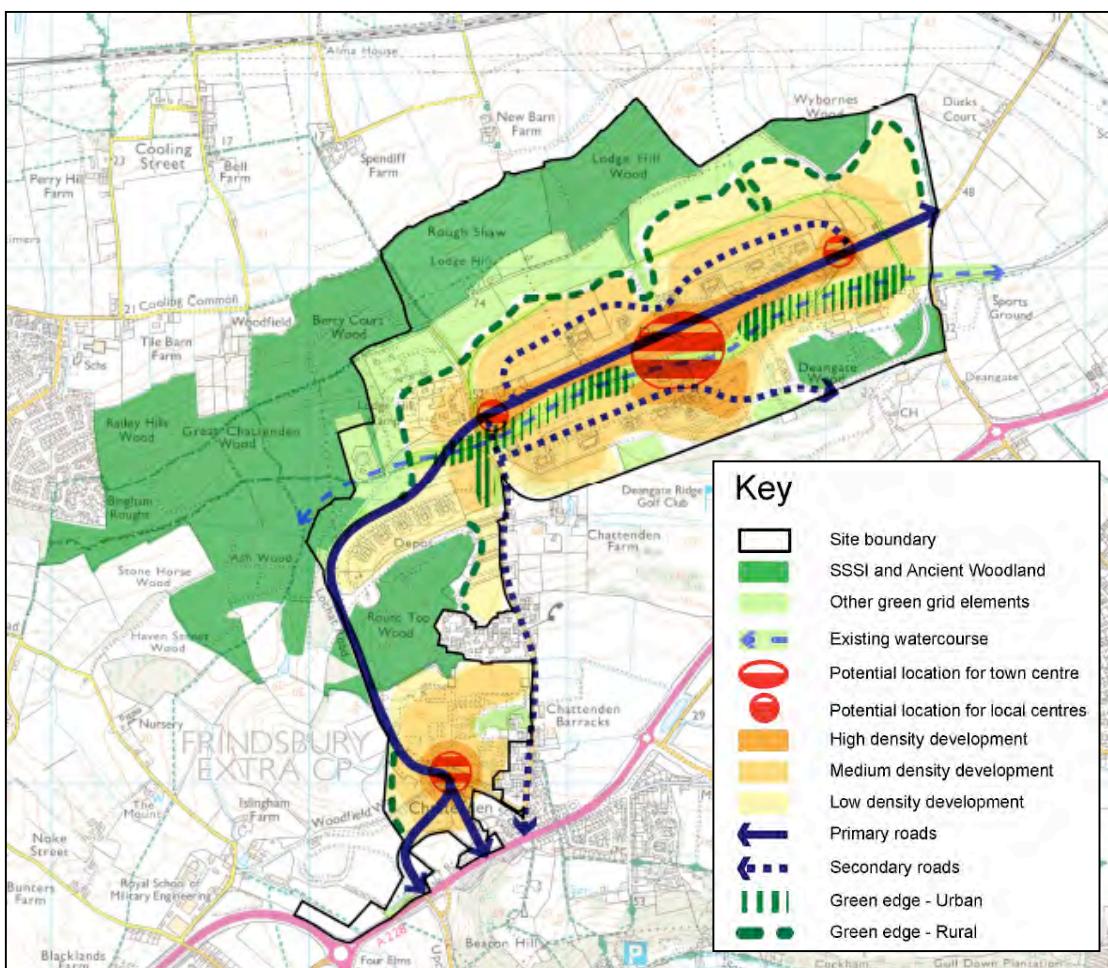


Figure 6.15: Urban and rural green edges

- 6.64 Frontage development can include flank walls facing public spaces, where habitable room windows face out. Habitable rooms include living rooms, dining rooms and bedrooms. Kitchens are not habitable rooms but they are still occupied for a lot of the day. They would therefore enable overlooking and are acceptable for this purpose.
- 6.65 Occasional garden boundaries facing roads or public space will also be acceptable provided the overall frontage remains active. The design of the boundary treatment must be appropriate to its setting; close board fencing is unlikely to be acceptable.

- 6.66 Buildings positioned close to the footpath or road edge will generally be preferable, but variations within the building line can be used where appropriate. It may be useful to step buildings forward at junctions. This defines the space, reduces forward visibility and therefore slows traffic. These principles also apply to urban green edges, where the major green grid stretches right into the core of the development.
- 6.67 At the countryside edges, buildings should generally be set back far enough to allow soft landscaping within the plot. There is more scope for variation in the building line here, to avoid the impression of a wall of development. Gaps between buildings can also be variable. They should enable views of the rural setting and major open spaces from within the development.



Figure 6.16: Rural and urban frontages

CH15 → Active frontages should be provided to all public spaces and countryside edges. Buildings should be set relatively close to the road within the development, and further back on the green edges, although this can vary. Views of the countryside and major open spaces should be provided from within the built areas.

- 6.68 None of the above design criteria place any restriction on architectural style. The objective is to ensure that Lodge Hill creates a high quality, liveable and sustainable environment for future residents, workers and visitors. Style is subjective, and the Council does not seek to restrict the design choices that future developers may make. In principle, any architectural style may be acceptable, subject to:
- taking into account the principles in this document and in the relevant Core Strategy policies. This includes assessment against Building for Life, or any subsequent scheme that the Council may adopt in its place, and the Council's housing design standards;
 - each detailed scheme being high quality in its own right, and complementing the adjacent sections of the development;
 - each scheme contributing to the creation of a place with its own distinct identity.
- 6.69 Having said this, many of the objectives in this document have a direct influence on style. For example, it can be difficult to meet higher sustainability

targets with traditional building designs. This may change in the future as technologies evolve. Alternatively, modern, sustainable design may become the norm for British housing development.

- 6.70 It is therefore likely that a large proportion of the site will be built out in relatively modern designs. The council is comfortable with this as a consequence of the policies in this document. Innovative and interesting responses to the design challenge will be welcomed, and will be considered against the same criteria set out above.

Masterplan framework

- 6.71 An illustrative masterplan for Lodge Hill is provided at the end of this chapter. This has taken the principles from this document, and combined them to produce a framework for the Lodge Hill site. This framework is one way in which the proposals for the site could be advanced. The proposals that finally come forward may be different. This is acceptable as long as the principles of the Development Brief have been met.

CH16 → Development proposals for Lodge Hill should be guided by the illustrative masterplan framework. Proposals that vary from this will need to demonstrate that they continue to meet the principles of the Development Brief.

- 6.72 The masterplan will need to be updated and reviewed over the course of the development, to reflect changes in circumstances and any lessons learnt from earlier phases. The outline planning application process will be able to set the parameters within which this should take place.

Design Codes

- 6.73 Design codes are a useful tool to guide the development of large-scale sites. They are particularly useful where a scheme is likely to be built out by several developers and over a long period of time. They have been used successfully in many large developments in the UK.



- 6.74 A design code sets the rules that all future development must follow. The level of detail can vary significantly. At one extreme, Poundbury's design code prescribed many architectural details. On the other hand, Vauban in Freiburg, Germany had a broad code that specified key urban design principles but left a lot of flexibility for future developers. Both are generally regarded as successful and are often cited as good examples of how coding works.



Figure 6.17: Poundbury and Freiburg – examples of design coding

- 6.75 The level of detail chosen depends on the balance needed between coherence and variety across the site. For Lodge Hill, the code should cover the main urban design and landscape principles but not architectural detail.

Coding for buildings should be limited to those elements that define public spaces and create their character. The code could include:

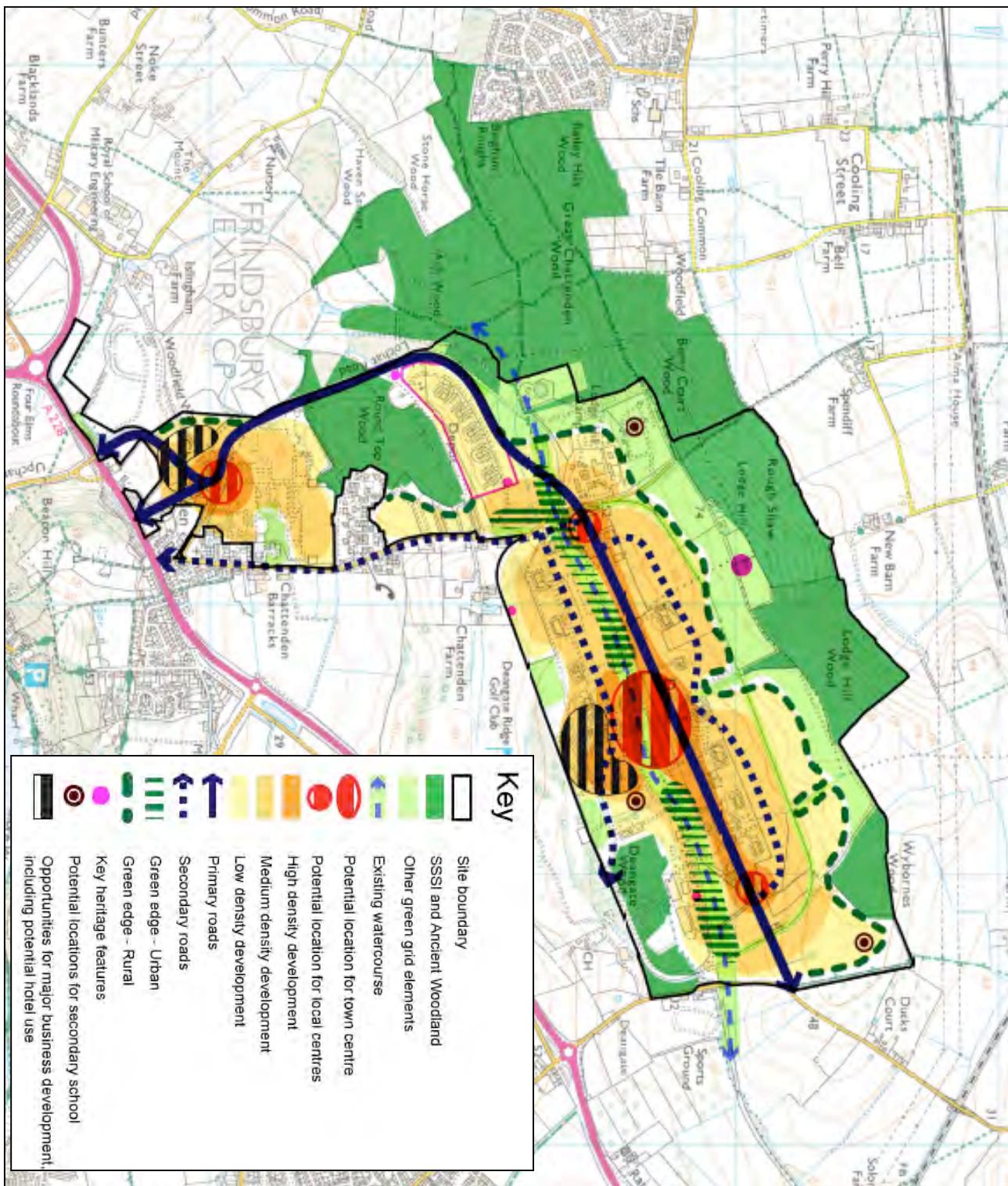
- building heights;
- density zones;
- setbacks from the road/footpath edge;
- widths of roads and other public spaces;
- the proportion of plot or frontage that is occupied by buildings;
- parking treatments;
- requirement for or spacing of feature buildings.

- 6.76 This list is not exhaustive. Other criteria may be found necessary once detailed work on the code begins.
- 6.77 The Lodge Hill site is not only very large but covers areas with very different characters and settings. A code that set sub-areas and differentiates between them is therefore recommended. However, other proposals for sub-areas will be considered depending on the masterplan that comes forward at application stage.

CH17 ➔ A design code for Lodge Hill should be submitted with the outline application. This should focus on key urban design principles and should consider the use of character areas to provide local identity to different parts of the development. The design code should be drawn up collaboratively between the developer and the council, and should be informed by engagement with the local community.

- 6.78 Once a design code has been agreed through the outline application process, all subsequent applications will be expected to comply with it. Where full (detailed) applications are submitted that do not directly relate to the outline application, the approved design code will be a material consideration. Such applications will need to demonstrate that the proposed designs reflect the guidance contained in the code.
- 6.79 Consideration should also be given to the preparation of more detailed codes for specific parts of the site at subsequent stages of the planning and design process. There may also be a need for reviews of the design codes alongside masterplan reviews, to ensure that they remain relevant and useful throughout the expected 15-20 year development timescale.

Masterplan



Illustrative
masterplan
framework for
Lodge Hill

7

Chapter seven Delivery

Process

- 7.1 Figure 7.1 summarises the route that the Lodge Hill proposals will take from planning policy to delivery on the ground. For Lodge Hill to successfully function as a whole place, there has to be an overall vision for the development from the outset. For this reason, the council expects proposals to come forward in the form of a site-wide outline application. This will establish permission for the principles of the development, including:
- maximum limits for floorspace for each use proposed;
 - maximum number of dwellings;
 - exact limits of the developable area;
 - site-wide masterplan and strategic design codes.

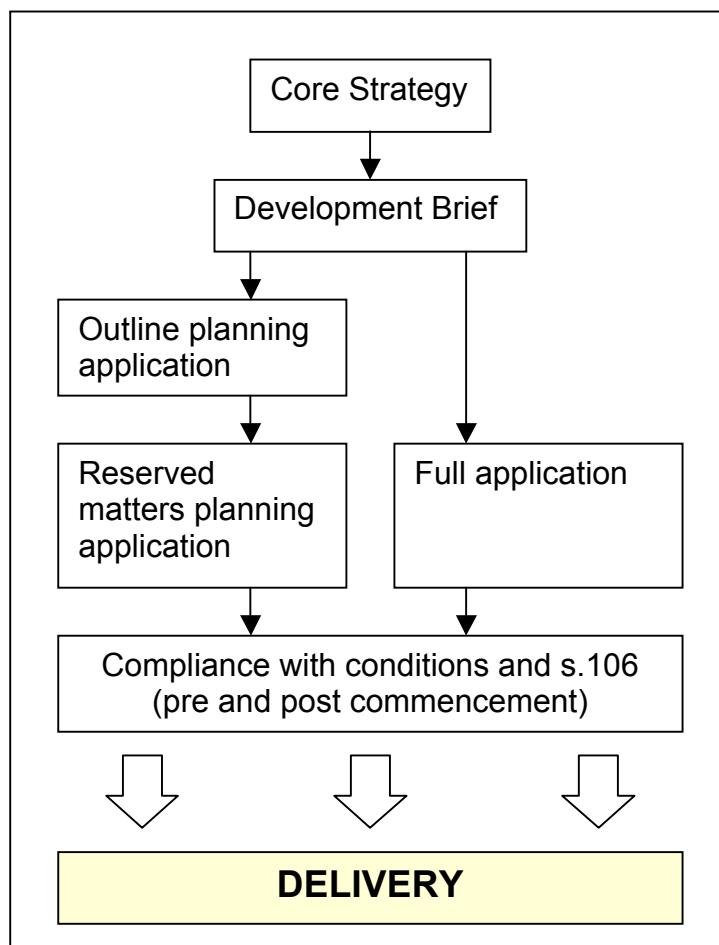


Fig. 7.1: Planning process

- 7.2 Reserved matters applications will then provide further detail for each phase or parcel of development. There may be an occasional parcel where proposals do not meet the parameters set down in the outline application. Full applications for this type of proposal will be considered by the council on their merits. They will have to conform to the principles and guidance set out in this Brief, and should complement the overall vision for Lodge Hill.

D1 ➔ Proposals for Lodge Hill should come forward as a site-wide outline application, including a site-wide illustrative masterplan. Proposals which come forward on a piecemeal basis and do not support the overall vision for Lodge Hill will not be supported by the council.

- 7.3 The developer checklists overleaf are a summary of the requirements of this Development Brief, setting out what needs to be submitted at the outline and detailed application stages.
- 7.4 It is likely that any outline permission will be subject to a large number of conditions, as well as the obligations within a s.106. A compliance report or summary should be submitted with each reserved matters application to show how it meets the requirements of the conditions and s.106.

Developer obligations

- 7.5 A s.106 agreement is a legal agreement that is entered into by a developer, the Council and (if necessary) other service providers. It is the main mechanism for ensuring that infrastructure is in place when it is needed, especially where it is off-site or requires third party involvement. Onsite infrastructure can be secured by conditions on any outline planning permission. This includes grey, green and social infrastructure (see Box 7.1).

Green infrastructure	Open spaces such as parks, allotments and play areas; green links that might include ecology corridors, footpaths and cycleways; tree planting in urban areas, sustainable urban drainage systems.
Grey infrastructure	Traditional infrastructure such as roads, sewers, energy production, phone and broadband
Social infrastructure	Community facilities like schools, health centres, and libraries. Can also include organisations and programmes as well as physical provision.

Box 7.1 Infrastructure types

- 7.6 Legislation has been passed to enable s.106 agreements to be replaced by the Community Infrastructure Levy (CIL). A s.106 agreement is required to relate to the specific impacts of an individual scheme, but CIL takes a tariff-based approach. Under the CIL system, every development of whatever scale makes a proportionate contribution to the area's overall infrastructure costs. Current legislation requires s.106 agreements to be significantly scaled back by April 2014. The Council currently intends to adopt a charging schedule for its own CIL by mid 2013.
- 7.7 To meet the delivery timescales set out in the Core Strategy, an outline application for Lodge Hill will need to be submitted and determined well before CIL is up and running in Medway. This being the case, the developers will be expected to commit to a comprehensive s.106 agreement to deliver the required infrastructure. Subsequent reserved matters applications will be tied to the original s.106. In this case, it is likely that Lodge Hill will be exempted from any CIL charge that applies to the rest of Medway.
- 7.8 Regardless of the delivery method, it is crucial that all infrastructure is in place as it is needed. It is an issue frequently raised by the local community. There are concerns that existing services on the Peninsula, from water supply to healthcare, are stretched and cannot be relied on to support the development.

Developer checklist 1

Submission requirements for a site-wide outline application*

- Community governance and management proposals, including funding
- Retail Impact Assessment to include consideration of impact on Hoo St Werburgh
- Economic Strategy
- Sustainability statement in accordance with the principles in Chapter 4
- Energy statement in accordance with Appendix 2
- Outline water-cycle strategy
- Access management strategy for SSSI, buffer zone, on-site nature reserves and ancient woodlands
- Parking strategy
- Site-wide landscape strategy including outline public art strategy
- Strategic design codes and identification of character areas
- Phasing plans
- Outcome of latest design review

Developer checklist 2

Submission requirements for a reserved matters or detailed application*

- Compliance report
- Sustainability statement in accordance with the policies in Chapter 4
- Final BREEAM Communities Certificate
- Detailed water-cycle strategy
- Outcome of latest design review

**Please note that these requirements are in addition to (or clarifications of) standard validation requirements, which must also be complied with. Contact the council's Development Management team for further advice on validation requirements.*

If a reserved matters application is submitted, it must also comply with any requirements set out in conditions or any legal agreement attached to the outline permission.

Arrangements for ongoing maintenance of new facilities and services will also need to be built in.

- 7.9 For some types of infrastructure, the demand (or even the site) for full provision may not exist until later in the development process. It may be suitable to make interim provision for some of these. This will also help to create early benefits for the existing community. Services where interim provision may be particularly useful include:
- health care;
 - schools (especially secondary);
 - community facilities;
 - bus service (subject to the criteria in Chapter 5);
 - retail.
- 7.10 Not all infrastructure delivery will be within the developer's control. In some cases they can provide the physical infrastructure (such as a health centre or school building) but are reliant on other parties for the final provision of the service. In other cases (such as water supply or broadband) they are entirely reliant on other parties for delivery. The developer will need to liaise closely with these other parties to plan the construction programme and phasing.

Timescales and phasing

- 7.11 The development of Lodge Hill is a 15-20 year project. Over this timescale, it is impossible to predict all the challenges that the development may have to meet. There will be changes in legislation and policies, and economies will continue to cycle between growth, stagnation and decline. The full impact of climate change is as yet unknown. Each of these will have impacts on Lodge Hill.
- 7.12 For Lodge Hill to be successful, the outline application, masterplan and s.106 agreement must be flexible enough to respond to these future challenges. However, the existing community and new residents will expect to have certainty about what is to happen on nearby parts of the site. Lack of certainty can also deter developers and investors and undermine the EIA that will need to be carried out at outline application stage. Any outline planning application for the site will fix certain parameters (such as floorspace ranges), within which flexibility can be achieved. Consideration of this through the planning process will take into account the need to balance flexibility and certainty.
- 7.13 Any discussion of phasing for the development must remain broad at this stage. Some guidelines and principles can be set down that will help to direct other decisions around implementation.
- 7.14 It is likely that the site will be divided into a few large phases, which would then be broken down into sub-phases or development parcels. This will allow development to proceed in small and manageable amounts that will enable a range of developers and uses to be accommodated on the site, but still allows for infrastructure and other requirements that have to be delivered on a wider scale.
- 7.15 The Core Strategy policy and evidence base suggests that the site may be broken into three broad phases. On the Core Strategy timescale, each of these would take around five years to build out. This may change by the time

detailed applications begin to come forward, but has been used as the basis for strategic planning to date.

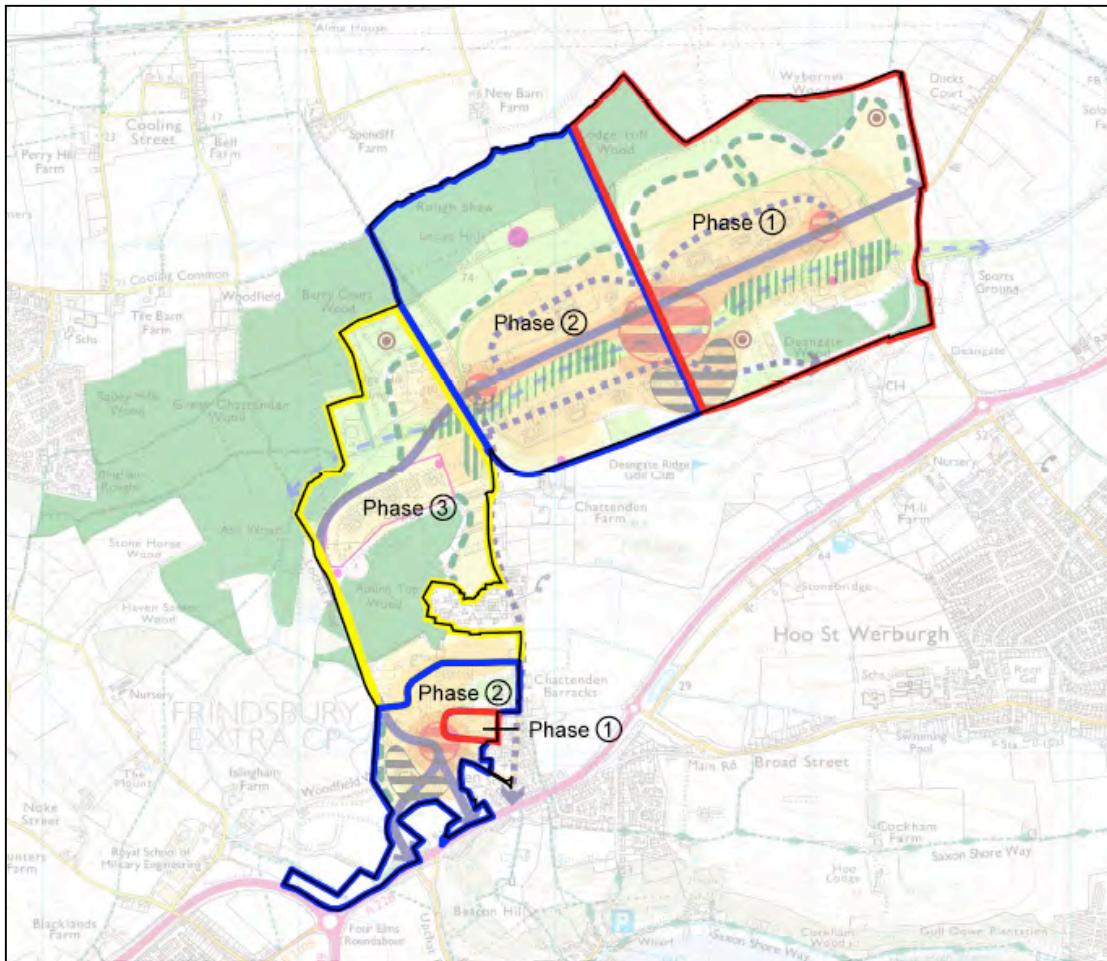


Figure 7.2: Core Strategy phasing

- 7.16 Use of small development parcels within the broad phases will help to provide a range of sizes, types and styles of development. The council encourages this approach. It should include a wide range of parcel types and sizes, including provision for self-build projects. These are encouraged as they are a very effective way of adding character and raising design and sustainability standards, as well as helping to create a fully mixed community. However, it is recognised that market factors will remain a significant influence on land disposal.
- 7.17 Where a scheme is being built over many phases, it is important that quality stays consistently high. The use of design codes and the standards set down in this document will go some way to ensuring this. Independent design review and design competitions are other possible tools.

D2 ➔ An independent design review should be undertaken of the whole site masterplan prior to the submission of an outline application, and also if any significant alterations are made to the masterplan after the original review. Design reviews may also be required for key parcels at the detailed design stage. Developers will be expected to meet any costs associated with this.

7.18 Design competitions are not likely to be appropriate for the whole site. However, they could be useful for some of the key sites or areas. There are sometimes concerns that competitions can lead to outlandish or attention-seeking architecture that would not relate well to the overall scheme. There is no reason why this has to be the case if the terms of the competition are set up with care. They can also be a very positive mechanism for community involvement. Possible subjects for a design competition could include:

- exemplar parcel(s) for sustainable design;
- schools, especially the secondary school;
- town centre landscaping proposals (town square/ town green);
- landmark public art;
- cultural or community projects around key heritage features (e.g. anti-aircraft station, expense magazines or renovation of retained buildings);
- landmark building at southern site entrance (possibly the hotel or a business unit);
- self-build or small developer parcels.

Construction stage impacts

7.19 Consultation has consistently found concerns amongst the local community regarding the potential impact of construction works over the expected 15-20 year development timescale. These impacts will need to be considered at outline planning application stage. There is potential for impacts on on-site ecology and nearby designated sites as well as on local communities.

7.20 While any development will cause some disruption, there are many measures that can be implemented to minimise this. Routing construction traffic so that it passes as few existing properties or communities as possible, for example, or using alternative modes to road transport, reduces noise, air quality and congestion impacts. Controls can also be established on hours of working, or when and where noisy equipment can be used.

D3 ➔ A Construction Code of Practice will need to be agreed between the Council and the developer before any development starts on site. This will address the potential impacts of the construction stage on nearby communities, local ecology and sustainability considerations.

7.21 There is also existing infrastructure on or near to the site, which will need to be taken into account during construction, such as water and gas mains. The requirements in relation to these are mainly controlled outside of planning legislation.



Ongoing engagement

The developer for Lodge Hill has already carried out a lot of community engagement. This informed the evidence base supporting the Core Strategy and this document, including the masterplan. It will continue to inform the proposals that will become an outline application for the site. The council has also held consultation events over a



Figure 7.3: Previous community engagement

number of years regarding proposed development at Lodge Hill, and in association with the production of the Medway Local Development Framework. This development brief was informed by consultation with local communities and a broad range of stakeholders. A formal six week consultation process was held in Autumn 2011, including events and meetings with residents and community groups in the local area. The work was planned in accordance with the Council's Statement of Community Involvement, to meet the standards expected for meaningful and effective engagement. An outline of this consultation work is set out in Appendix 1.

- 7.23 The community should continue to be involved through all stages of Lodge Hill's development. The Council's Statement of Community Involvement should inform the strategy for this. Lodge Hill will be the largest single development to take place in Medway over the next fifteen years (the timescale of the Core Strategy), and probably beyond. It will be on a larger scale than any of the existing villages. Community engagement strategies must recognise that this results in sensitivity around the proposals.
- 7.24 The future community of Lodge Hill will have the greatest stake in how it should develop, but cannot be involved before development begins. The existing community at Chattenden can give some insight as they will be closely affected by proposals and will be integrated into the overall settlement. As development progresses, people moving into Lodge Hill must be included as well as those living in the surrounding areas. Local businesses (existing and in Lodge Hill) should also be involved.
- 7.25** The Community Trust (or similar) would be an ideal means to facilitate some of this ongoing arrangement. It would already be aware of the community's concerns and priorities. It would also have good access to and relationships with existing groups. It would therefore be able to direct efforts where they are most needed.

D4 ➔ Community engagement should take place with the existing, surrounding and new communities throughout all stages of the development. Opportunities to use the Lodge Hill community organisation to help facilitate this should be maximised.

- 7.26 This potential role is one reason why any Trust should be set up as early as possible.
- 7.27** Community engagement will be particularly important where facilities are proposed to serve a particular section of the community. For example, where youth facilities are being planned, young people in the area should be able to influence what form these take. Again, this is something that the community organisation would be well placed to lead on.

A1

Appendix one Consultations Summary

Consultations on the prospect of development at Lodge Hill have been carried out by both the council and Land Securities as the DIO's land sale delivery partner.

Core Strategy consultations

The council has carried out a number of consultations into the draft Core Strategy. This overarching policy document includes the strategic allocation of the Lodge Hill site for a new settlement, and many of the responses that were received included comments on Lodge Hill. The responses to consultation on the Core Strategy are lengthy documents and have not been reproduced here. They are available on the council's website as follows:

Issues and Options stage (July 2009):

<http://www.medway.gov.uk/environmentandplanning/developmentplan/localdevelopmentframework/issuesandoptionsreport.aspx>

Pre-publication draft Core Strategy (November 2010):

<http://www.medway.gov.uk/environmentandplanning/developmentplan/localdevelopmentframework.aspx>

Consultation was also carried out on a publication draft of the Core Strategy in September 2011. This is a formal stage in the production of a Core Strategy, and all representations received were forwarded to the Planning Inspectorate in preparation for the Hearings into the draft Core Strategy. They will be made publicly available online and the latest information (including regarding the process) will be available here:

<http://www.medway.gov.uk/environmentandplanning/developmentplan/localdevelopmentframework/corestrategy.aspx>

Development Brief consultation

A six-week period of public consultation on the draft version of this development brief was held from 30 August 2011 to 14 October 2011. This was advertised online and through posters and leaflets sent to the parish councils, Hoo library and local community centres, and included:

- public exhibitions (afternoon and evening) at High Halstow, Cliffe Woods, Chattenden, Hoo St Werburgh and Wainscott;
- publication of the draft Development Brief on the council's website and through the Limehouse consultation portal;
- weekly webchat facility through the Lodge Hill Facebook page;
- attendance at existing local youth groups, Sure Start child health clinic, Chattenden Primary School's community group and Rural Liaison Committee.

Full details of the consultation process, the responses received and how they have been taken into account in this final version are available in a separate report here: www.medway.gov.uk/lodgehill

Developer consultations

The developer has also carried out a significant amount of community engagement on their proposals at Lodge Hill. The results of these were made available to the council to help inform the draft Development Brief.

Full reports on the developers' consultation are available from their website at: <http://www.lodgehill.info/core-strategy-consultation/ongoing-consultation/>

A2

Appendix two Guidance for energy statements

Energy Statement format for outline and detailed applications

The assessment should include:

- at outline stage, baseline energy demand and carbon dioxide emissions using sample SAP and SBEM calculations;
- at detailed stage, SAP and SBEM assessments would be required for all building types;
- proposals for the reduction of energy demand and carbon dioxide through energy efficiency measures, showing kWh of energy and kgCO₂ saved as well as the % reduction achieved;
- carbon dioxide emissions from heating, cooling and electrical power following energy efficiency measures;
- proposals for meeting residual energy demands through low and zero carbon measures (energy (kWh) savings and carbon dioxide savings should be specified);
- calculation of the remaining energy demand and carbon dioxide emissions;
- calculation of the remaining carbon dioxide emissions (if any) that need to be offset using allowable solutions.

The energy demand assessment should be carried out in advance of planning permission in order to ensure compliance with Part L Regulations. This should be carried out as follows:

- a) **For residential developments:** Calculate baseline total energy demand and carbon dioxide emissions from heating, hot water, pumps and fans, based on the Standard Assessment Procedure (SAP).
- b) **For non-residential developments:** Undertake BREDEM-12, SBEM or other approved total energy assessment at an early stage in the design.

Reductions in energy consumption and carbon dioxide emissions resulting from energy efficiency measures:

- Provide details of the energy efficiency measures that will be incorporated into the development.
- Specific details, such as building material U-values, ratings of electrical appliances, etc should be included.

If decentralised energy is proposed load profiles should be calculated for the site on a daily basis and should consider likely fluctuations in demand over a day. This will inform what size of system is appropriate and therefore how much space is required for the energy centre as well as providing an accurate picture of the energy reduction that can be achieved.

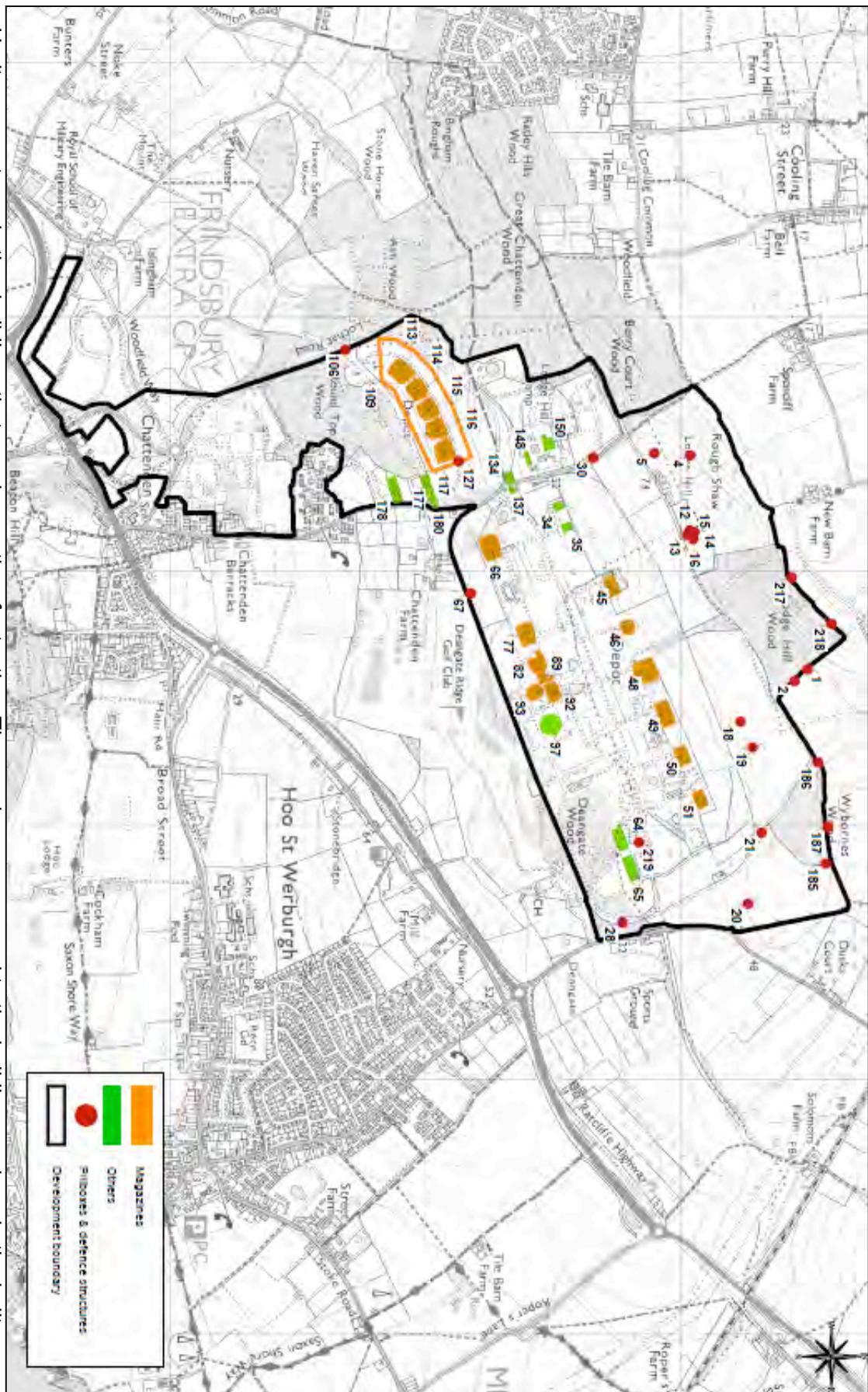
A concluding section should be provided outlining the contribution of each set of measures, technology or combination of technologies towards meeting the relevant target and providing recommendations as to which would be more suitable for the site.

A3

Appendix three Heritage assets and buildings worthy of retention

Heritage assets and other buildings that may be worthy of retention. The numbers correspond to the building numbers in the built heritage report that supports the Core Strategy. This is available at:

<http://www.medway.gov.uk/environmentandplanning/developmentplan/localdevelopmentframework/ldevidencebase/lodgohill.aspx>



Pillboxes & defence structures	
Building nos.	Reason for inclusion
1	Significance
2	Significance
4	Significance
5	Significance
12	Significance. Part of Chattenden Ridge anti-aircraft station
13	Significance. Part of Chattenden Ridge anti-aircraft station
14	Significance. Part of Chattenden Ridge anti-aircraft station
15	Significance. Part of Chattenden Ridge anti-aircraft station
16	Significance. Part of Chattenden Ridge anti-aircraft station
18	Significance
19	Significance
20	Significance
21	Significance
28	Significance
30	Significance
67	Significance (Grade II listed)
106	Significance (Grade II listed)
127	Significance (Grade II listed)
185	Significance
186	Significance
187	Significance
217	Significance
218	Significance
219	Significance (Grade II listed)

Magazines	
Building nos.	Reason for inclusion
45	Local significance
46	Local significance
49	Local significance
50	Local significance
51	Local significance
66	Local significance
77	Local significance
81	Local significance
82	Local significance
89	Local significance
92	Local significance
93	Local significance (original magazine shed replaced by structure of no significance, but earthworks remain)
109	Local significance (wall around Chattenden magazine complex)
113	Local significance
114	Local significance
115	Local significance
116	Local significance
117	Local significance

Others	
Building nos.	Reason for inclusion
34	Character building with flexible re-use potential
35	Character building with flexible re-use potential
64	Character building with flexible re-use potential. Historic railway interchange
65	Character building with flexible re-use potential. Historic railway interchange
97	Laboratory area - demolished but locally significant; potential to reflect in future proposals
134	Character building. Relatively easy to re-use?
137	Character building. Relatively easy to re-use?
148	Local landmark. Little architectural merit but consider re-using/reflecting distinctive glazed roof form
150	Sustainability. Little architectural merit but seems solidly constructed & relatively easy to re-use.
177	Character dwellings & interesting local history. Poor condition but may be more sustainable to refurbish?.
178	Character dwellings & interesting local history. Poor condition but may be more sustainable to refurbish?.
180	Character building. In public part of site so has relevance to existing community



Who to contact

 **Customer services: 01634 333333** 8am to 8pm (Mon-Fri) 9am to 1pm (Sat)

Please note: Calls to customer services may be recorded or monitored for security and staff development purposes.

 **Planning, Policy and Design, Medway Council, Gun Wharf, Dock Road, Chatham, Kent ME4 4TR**

 Email: lodgehill@medway.gov.uk Website: www.medway.gov.uk/lodgehill

 Minicom: **01634 333111**

This information can be made available in other formats from **01634 333333**

If you have any questions about this leaflet and you want to speak to someone in your own language please ring **01634 335577**

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