

## 6.2 Masterplan framework

### Introduction

This chapter establishes the framework for the SMF following the mandatory spatial principles presented in chapter 5.

This series of layered frameworks will enable the vision for the SMF area to be realised, forming a skeleton for masterplanning, upon which the future masterplan proposals will expand and elaborate.

It is also important at this stage to incorporate flexibility into the SMF, as future planning applications will be delivered by a variety of land owners, developers and consultants, over a lengthy period of time, in a fast moving industry and in relation to market demand.

Future proposals should demonstrate how these spatial principles have been taken into consideration and informed their responsive design. These are further expended in the following text.

## 6.3 Framework layers

The next part of the SMF defines area-wide spatial guidance across a series of layers illustrated opposite in figure 6.3, which are expanded upon (and enlarged) in this chapter:

- Green and blue infrastructure (1) - highlighting the overarching landscape and drainage strategy with an indicative approach to open space, play and SuDS
- Access and movement (2) - identifying the key routes through the SMF, including an emphasis on sustainable and active travel, as well as retaining connections to the wider countryside
- Land use and community infrastructure (3) - overarching land use strategy identifying locations for new homes, the Social Heart and local centre and education uses
- Placemaking and wayfinding (4) - defining areas of distinct character and identity
- Density (5) - defining an appropriate residential density strategy
- Height and views (6) - illustrating the building heights and key views strategy.

These individual layers are then combined into the overall Framework Plan (7).



Figure 6.3 Framework plans (see following pages for larger versions)



## 6.4 Green and blue infrastructure

### Summary

The green and blue infrastructure framework is illustrated in figure 6.4, and described over the next few pages. As part of future planning applications, proposals should reference Natural England's Planning and Green Infrastructure and Design Guide and EFDC's G.I. Strategy.

An overarching concept of this SMF is to plan development so that it is landscaped and incorporates existing landscape features.

The existing network of hedgerows, copses of mature trees and several feature trees provides an established landscape structure. Alongside these features, there are formal PRoWs and also informal walking routes created by the local community. These features provide an established landscape structure and routeways that provide the basis of this SMF. A range of open space opportunities are then identified to incorporate the open space requirements above into a wider landscape structure across the SMF. The intention is to ensure that every new home within the SMF is no further than 150m away from an area of green space or greenway, and that the SMF incorporates two large areas of open space (Church Fields and the Social Heart) within the proposal.

The gentle sloping topography of the SMF area makes it ideal for the use of Sustainable urban Drainage Systems (SuDS), and the overarching aim of the drainage strategy is, at times of high rainfall, to store rainwater within onsite attenuation features, restricting the rate water discharges into the Cripsey Brook tributaries.

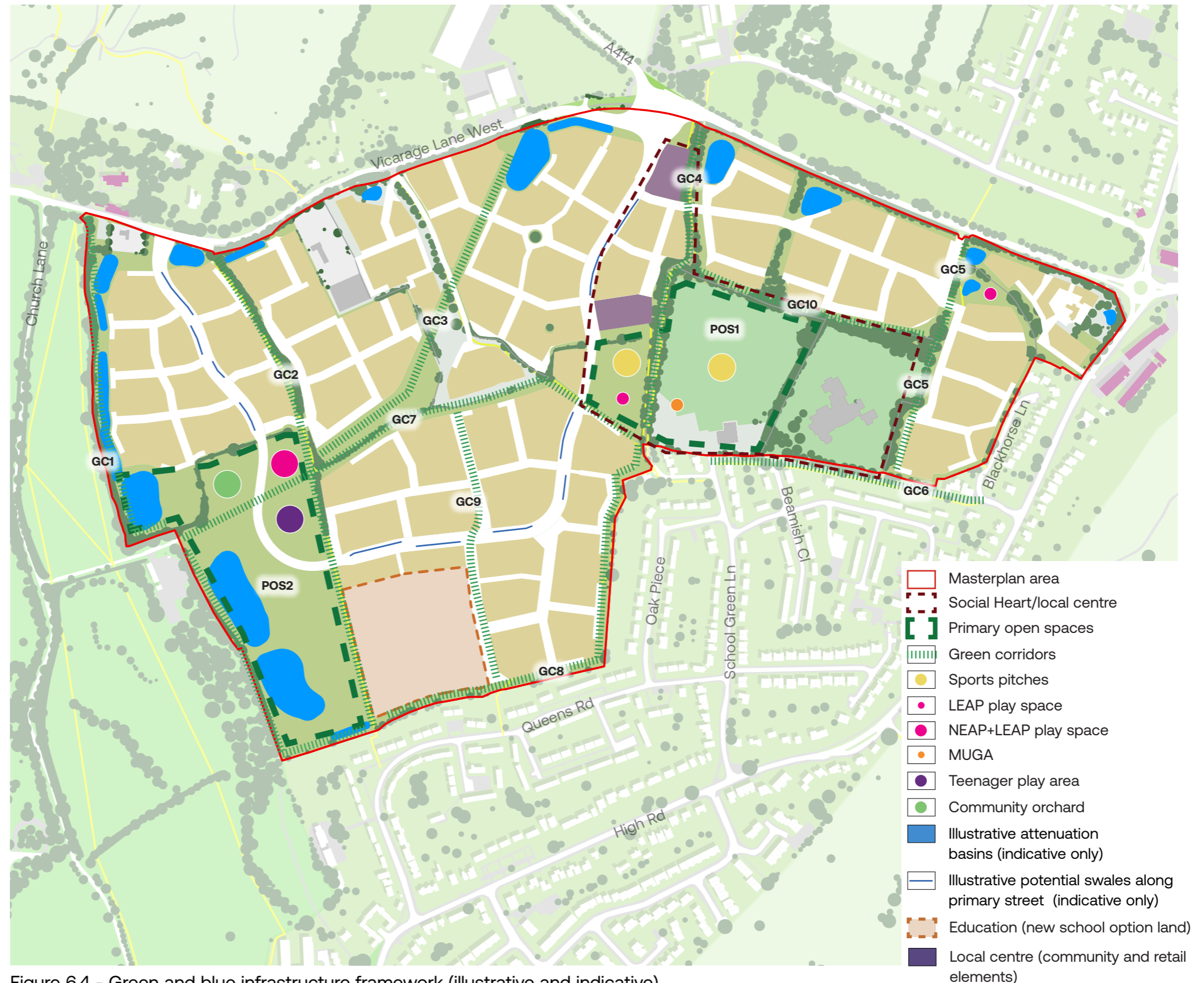


Figure 6.4 - Green and blue infrastructure framework (illustrative and indicative)

There have historically been flooding and drainage problems in North Weald, therefore the proposal should demonstrate how it manages surface water, creates attractive SuDS features that become ecological assets, and takes into account climate change.

Future detailed design applications should reference The SuDS Manual (2015). For further information see p108 for sustainable drainage information.



Proposals should demonstrate how they have responded to the existing landscape context of the site, including topography and existing site vegetation (including mature trees and hedgerows). These are to be retained where possible to support the landscape-led approach to the SMF. Figure 6.4 identifies the primary areas of open space, green corridors and play areas for the SMF.

The primary open spaces will form focal and social spaces within the SMF providing a variety of community facilities. The green corridors will facilitate pedestrian movement and where appropriate cycle access around the SMF area and integrate the land into the wider village (ensuring the links to key destinations in the village are met by pedestrian and cycle routes, to encourage their use over short car journeys). The primary open spaces and green corridors also ensure that every new resident lives within 150 metres from either a major open space or a green corridor. Further details on the principle open spaces and greenways

are within character area guidance in chapter 7 (p114).

The green and blue infrastructure framework plan illustrates approximately 17.8ha of open space, including existing trees and hedgerows and the Memorial Playing Fields, primary areas of open space, greenways, proposed play areas and attenuation basins. This broadly calculates as 34% of the SMF area.

### Open space requirements

The Epping Forest District Council (EFDC) Open Space Strategy was prepared in 2017 and provides a guide across the District on the amount of open space to be provided in new development. The application of this Open Space Strategy for the five residential allocation sites at North Weald Bassett results in this SMF having to plan for the provision of 11 hectares of open space (approximately 25% of the total area of the five residential development sites) as per figure 6.5.

Type of open space	Standard (ha / 1,000 population)	Minimum area required (ha)
Amenity green space	0.6	1.5
Parks and gardens	0.8	1.99
Natural/semi-natural green space	1.8	4.49
Playing pitches	1.2	2.99*
Other outdoor sports	0.4	1
Equipped play	0.25	0.62
Other inc MUGA and skate	0.3	0.75
<b>TOTAL</b>	<b>5.35</b>	<b>11.09</b>

Figure 6.5 - Open space requirement.  
\*The SMF is meeting the locally identified need for junior and mini pitches as set out in the EFDC Playing Pitch Strategy.

Additionally, EFDC's Green and Blue Infrastructure Strategy seeks to avoid the creation of "single function" open spaces and instead proposes that open spaces are multifunctional. With careful design and management, these spaces could perform multiple functions such as play, biodiversity, climate resilience, drainage and health and wellbeing. Further detail on the character of the development's open spaces is provided in chapter 7 (p114).

### Play provision

It is proposed that the focus for formalised children's play spaces, inclusive of play equipment, should be the two primary open spaces (Social Heart and Church Fields). In this way, dedicated children's play space can be located within easy walking distance of all future residents living within the SMF area (approximately 500m at the furthest) and also be accessible to existing residents.

The strategy of two primary equipped areas of play will enable a wider range of equipment to be provided for children to explore, interact and encourage greater usage. The alternative would be to provide multiple smaller facilities. However, this would dilute equipment over a wider area and provide less opportunity for children to interact.

The Memorial Playing Fields already provides children's play equipment. It is proposed that the playing fields become a Social Heart of the SMF. The new development would provide funding for the upgrading and expanding this play equipment, forming a LEAP and a MUGA (Multi-Use Games Area). The Memorial Playing Fields would be complemented by new play facilities at the proposed Church Fields Open space to take the form of an equipped area of play suitable for infants, juniors and older children to include both a Neighbourhood Equipped Area of Play (NEAP) and Local Equipped Area

of Play (LEAP). This area will also include facilities for youth play.

Opportunities should be sought at detailed design stage to provide smaller play opportunities or Local Areas for Play (LAPs) including play on the way in the greenways and open spaces of the SMF.

### Sports pitches

Fields In Trust standards recommend the provision of 2.07ha of Sport Pitches within the SMF area. This translates to 1 Junior and 1 Mini pitch. However, in light of the requirements of the Playing Pitch Strategy, and following discussions with the council, the SMF proposes more locally appropriate provision.

The Memorial Playing Field currently provides a senior size pitch suitable for football and incorporates a cricket wicket. As part of the SMF, it is proposed that funding from the development be provided to upgrade these facilities to encourage their usage. This will be complimented within the SMF area with a new U9/10 pitch, providing sporting opportunities for younger children and smaller sports clubs, which the village currently lacks.

Consideration should be given to how and where sports clubs and groups would park when using these sporting facilities at detailed design stage.

### Suitable Alternative Natural Greenspace (SANG)

A 6.2km radius of influence from Epping Forest has indicated that the western edge of the SMF area will be required to provide land for a potential SANG.

This results in two questions for the SMF:

1. Where to best place any SANG land?



## 2. What quantum of SANG land will be required?

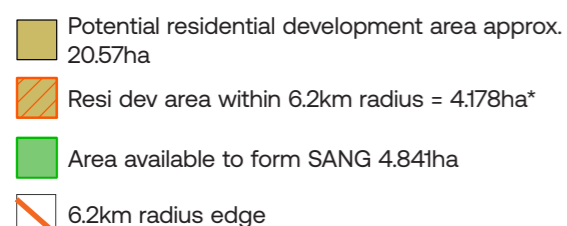
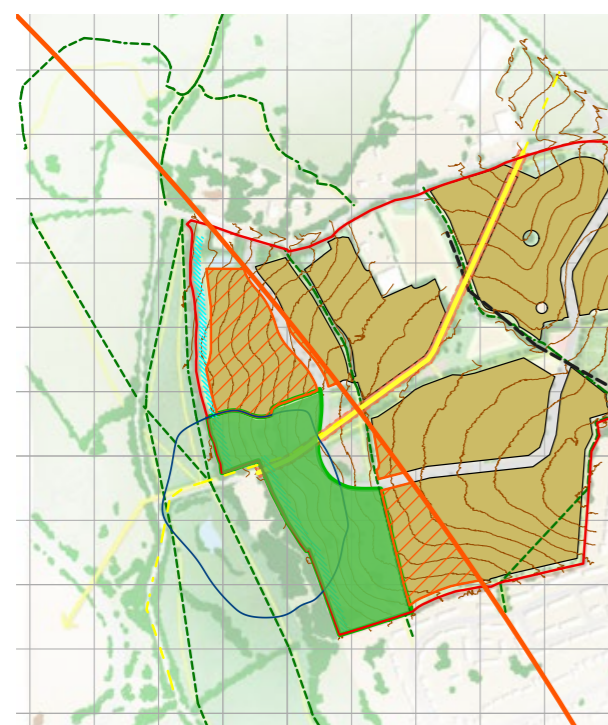


Figure 6.6 - Potential SANG area within SMF

Church Fields has been identified as the most suitable location for SANG land. A large portion of Church Fields is therefore proposed to be SANG, helping alleviate pressure on Epping Forest, providing natural and semi-natural green space for new and existing residents. To provide a naturalistic environment, mostly catering to dog walkers, the SANG land would have an informal character comprising species rich grassland, gravel paths, scrub and tree planting. In addition, landscape features that compliment SANG use have been incorporated into the

design such as SuDS basins and a traditional orchard, both elements were designed to suit the naturalistic character. The proposals will also comprise seating areas and some parking for visitors. The southern most basin will entail a shallow area of water, suitable for dogs to bathe in, to further attract dog owners to the area and away from Epping Forest. Opportunities should be sought to include provision of natural play areas incorporated within the SANG.

Being in a location that opens up onto the extensive open space and a 20km Public Right of Way network that surrounds the village, which includes formal public rights of way and further informal routes, makes the area well suited to providing natural and semi-natural green space for the enjoyment of residents.

As for quantum, using the standard of 8 hectares per 1,000 population, 2.8-3.9ha of SANG would be required at NWB, depending on the residential density used (36-50dph). As illustrated in figure 6.6 there is around 4.8ha of land available to form a SANG within the SMF this confirms that the site can easily accommodate the required SANG for residential development within the 6.2km Zone of Influence.

As part of the proposed SANG, where appropriate, any landscaping seed mix should include seed from local provenance to ensure that the area continues to support a high biodiversity.

It is up to the applicants to set out the further detail of the SANG at planning application stage. A management and maintenance plan for the SANG should be secured by legal agreement at planning application stage. The detailed design for the SANG brought forward in a planning application should be fit for purpose and

enable suitable lengths of walking route to be provided.

### Biodiversity enhancement and net gain

The SMF area will provide a significant local recreational resource, helping to protect Epping Forest. The majority of trees and hedges are to be retained and there are opportunities to restore historic hedgerows with new native species planting reinforcing the green corridors across the area. The pond within the SMF area will benefit from restoration. Under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021), developers are required to deliver a 10% Biodiversity Net Gain.

### Drainage introduction

As referenced in chapter 3, there have historically been flooding and drainage problems in North Weald. A fundamental design objective of the SMF is to:

- a) Reduce surface water from the SMF area into the surrounding water courses at times of high rainfall.
- b) To control and manage water flows during heavy rainfalls by storing and holding water within the SMF area, taking into account climate change.
- c) Create attractive dry/wetland drainage basins that will become an ecological asset.

Surface water management strategies are a requirement for each developer.

### Existing drainage arrangements

The SMF area covers approximately 51 hectares (126 acres) and is predominantly arable farmland and playing fields, interspersed with small clusters of built development and hardstanding notably at sites R2, R4 and R5.

Surface water from the SMF area currently drains into the Cripsey Brook to the north of the A414. The topography of the land means that surface water naturally outfalls into two tributaries of the Cripsey Brook as follows:

1. The majority of the SMF area drains westerly towards the river adjacent to site R3, which in turn flows in a northerly direction until it meets Cripsey Brook.
2. The north-eastern part of the SMF area and A414 drains northwards and utilises a series of smaller tributaries which outfall into the Cripsey Brook.

### Overview of proposed drainage strategy

The drainage strategy should follow the requirements set out in Section G of the Environment Agency's "Approach to Groundwater Protection" and in accordance with Essex County Councils SuDS Design Guide, where appropriate.

The gently sloping topography of the SMF area makes it ideal for the use of Sustainable urban Drainage Systems (SuDS).

The overarching aim of the drainage strategy is, at times of high rainfall, to store rainwater within onsite attenuation features within the SMF area and restrict the rate that water discharges into the Cripsey Brook tributaries.

In accordance with Essex County Council and Epping Forest District Council's



standards, the rate that water drains from the SMF area will be restricted to no greater than the existing run-off rate for a typical rainfall event in any year during all storm events up to and including heavy rainfalls with a 1% probability of occurring in any year with a 40% allowance for climate change.

To achieve this a number of drainage methodologies are proposed to manage and control water flows across the site for discharge into the Cripsey Brook tributaries. These can broadly be split into two categories:

1. Strategic storage features – specifically designed to manage rainwater run-off from the site by controlling discharge rates and storing water. These attenuation features can be either dry (basins) the majority of the time or designed to have a low water level in them (ponds). To physically restrict the outfall from these storage ponds, a flow control device will be installed. Consideration should be given to water re-use where possible and where appropriate.

2. Other drainage features – designed to manage water flows entering the strategic storage basins. This could include swales, filter strips, permeable paving and more traditional piped systems.

Figure 6.4 shows the illustrative location of the strategic storage features, taking account of the existing topography. These storage features shown are indicative only and subject to each developer's/land owner's future applications.

The storage features provide an opportunity to create localised amenity spaces associated with these features and for several of these to be focal points such as pocket parks or local greens. These spaces also provide an opportunity to create ecological habitat and enhance the visual

appearance of new development.

The drainage strategy should create landscape character and opportunities for BNG, placemaking and education

The final location, design, specification and form of these spaces will be detailed through future planning applications of the five development sites.

## 6.5 Access and movement

### Summary

The access and movement framework is illustrated in figure 6.8, and described over the next few pages. Proposals must identify how active travel and sustainable patterns of movement will be achieved across the site. The SMF must help retain existing connections to the wider countryside and improve active travel links through the village.

A network of destination and recreation routes will be established, connecting key hubs across the village and to the wider countryside. An east-west pedestrian and cycle connection will be established within the site, connecting from the High Road through to the North Weald Airfield Masterplan, crossing through the Social Heart of the SMF.

North-south links through the SMF to the existing village will be achieved through a pedestrian/cycle gateway off Queen's Road, providing active travel access to the existing village centre. In addition, these north/south links through the development help provide the missing connections/alternative routes between Bridleways 19 and 34 to the north and Bridleways 85 and 87 to the south.

A new roundabout on the junction of the A414 and Vicarage Lane West will enable public transport to enter and leave the site. The bus route will loop through the site to

Vicarage Lane West, serving the Social Heart (including the local centre, Memorial Playing Fields and St Andrew's primary school), and the SANG natural open space on the western side of the SMF. Opportunities existing for buses to leave the A414 in advance of the roundabout in order to serve the eastern half of the development providing for greater bus penetration into the heart of the residential before continuing the loop described above.

This primary vehicular access at the junction of the A414 and Vicarage Lane West will place the majority of traffic generated on the strategic network (rather than the High Road), and enable a reduction in vehicular speed along a section of the A414, improving pedestrian crossings of the A414.

### Pedestrian and cycle strategy

The Green and Blue Framework identified a strategic green network radiating through the site incorporating key strategic pedestrian and cycle corridors through the SMF.

The intention is to connect destination hubs throughout the village, using the SMF to improve or provide missing links, whilst retaining much used connections to the wider countryside.

This will help promote active travel within the village and help strengthen the concept of local living and the 15 minute neighbourhood. Primary routes would provide direct walking and cycling routes to key destination hubs and local services around North Weald Bassett, together with a range of recreational routes and improvements to the existing pedestrian and cycle network. In addition, lower hierarchy, more informal pedestrian routes will connect into the edges of the built form and street layout at key connections to ensure good connectivity

into this wider network.

### Proposed modified and stopped-up footpaths

As part of the creation of these green corridors it is proposed to make the following changes to the existing Public Rights of Ways (figure 6.7):

- 1) Re-align footpath 40 to run around the edge of site R3 to reflect current walking routes and enable the creation of a green corridor adjacent existing residential properties.
- 2) Re-align footpath 93 to create a direct walking route to St Andrew's Primary School, and to discourage crossing of A414 here.
- 3) Stop up part of footpath 37 to avoid duplication of formal route with adjacent byway and give greater visual prominence to the proposed social heart.

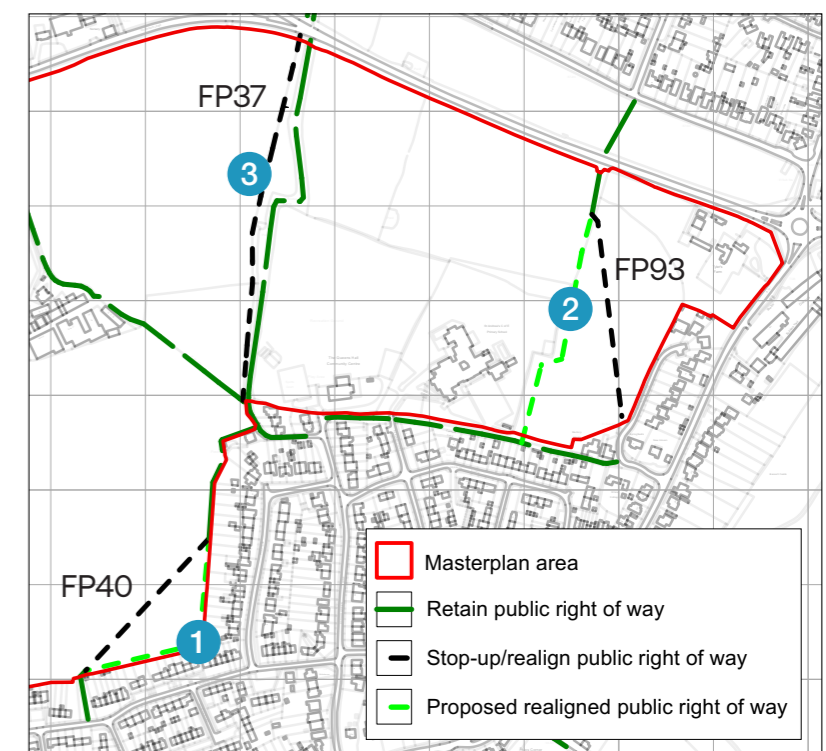


Figure 6.7 - Proposed modified and stopped-up footpaths