



EAST OF
HALEWOOD

MASTERPLAN

June 2020

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open
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on behalf of Knowsley Council:



Knowsley Council

with support from:



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> Introduction

1.1 This masterplan has been produced by Knowsley Council, supported by Optimised Environments Ltd (OPEN). Its purpose is to guide the comprehensive development of the site known as the **East of Halewood Sustainable Urban Extension (SUE)** at Halewood.

1.2 The site is one of several SUEs allocated for new residential development in the Local Plan Core Strategy 2016. The site sits at the heart of a strategic investment corridor, with potential to drive sub-regional economic development objectives, connecting Halewood with Liverpool City, Liverpool airport, Halton and beyond, via the Mersey Gateway bridge.

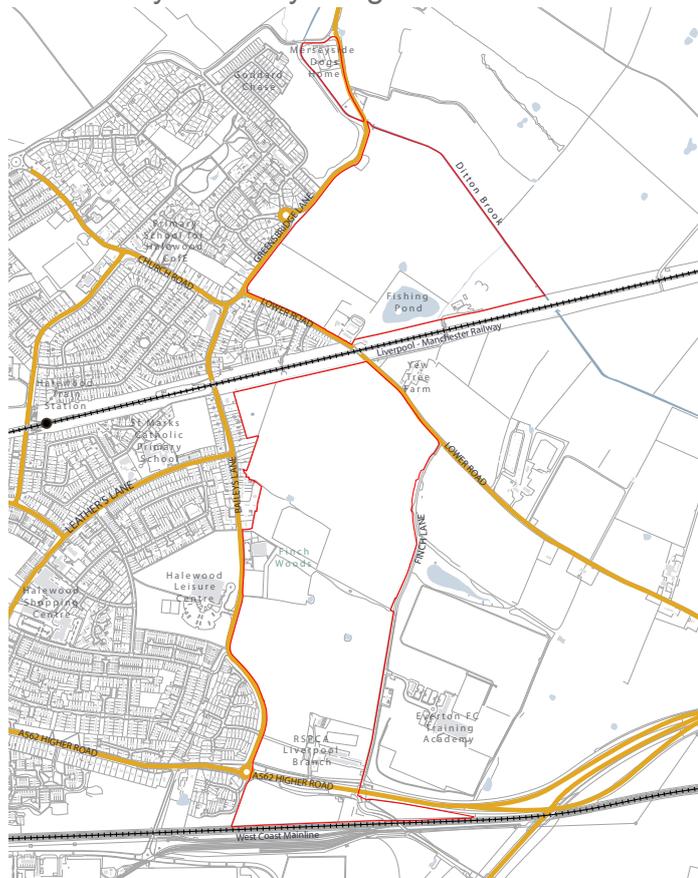


Figure 1.1 **East of Halewood SUE site**
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The need for a masterplan

1.3 Policy SUE1 of the Knowsley Local Plan Core Strategy identifies nine SUEs. East of Halewood SUE is identified for residential development under SUE1 clause 1g.

1.4 Local Plan Policy SUE2 sets out a number of universal principles and states that for the largest SUEs (which includes East of Halewood), spatial frameworks and guidance will be provided in the form of a Supplementary Planning Document (SPD) and masterplan;

1.5 *“Proposals for development within each of these locations will only be granted planning permission where they are consistent with a single detailed masterplan for the whole of the Sustainable Urban Extension which is approved by the Council. The masterplan should accord with development plan policy and any associated Supplementary Planning Document”*

1.6 The following masterplan report fulfils the requirement for a ‘single detailed masterplan’ for East of Halewood and as such will have significant weight in the development management process. It will be a material consideration in the assessment of all planning applications within the East of Halewood site.

1.7 This masterplan report is consistent with, and should be read in tandem with, the SPD for East of Halewood prepared by Knowsley Council. This is explained further in Chapter 4 of this masterplan report.

Masterplan preparation and post public consultation

1.8 The diagram opposite illustrates the stages of the masterplanning process undertaken for East of Halewood. This masterplan report summarises the key conclusions from the wider process.



Figure 1.2 Masterplanning process

This final masterplan report has been published in March 2020 following a six week period of public consultation on the draft masterplan (and supporting baseline and options documents) as well as the draft East of Halewood SPD in February 2019. Following the conclusion of the consultation period, a process of analysis and evaluation of all consultation responses received, was undertaken. The masterplan and supporting design guidance has been updated to reflect a variety of observations and advisory comments received during this period where appropriate. The masterplan has been approved by Planning Committee and has been adopted by KMBC in March 2020.

For a full account of the feedback received and the subsequent amendments to the masterplan, please refer to the supporting Consultation and Stakeholder Engagement report.

Masterplan objectives

- 1.9 The East of Halewood masterplan will coordinate what is an exceptional development opportunity. It is intended to help Knowsley Council to engage and work collaboratively with developers and landowners to ensure that its ambitions are realised and benefits to the communities of Knowsley are maximised.
- 1.10 In responding to the development plan policy and the East of Halewood SPD, the masterplan:
- 1) Confirms the vision and development principles for the site, shaped by stakeholder collaboration (and public consultation);
 - 2) Facilitates a coordinated and comprehensive masterplanning approach, to be implemented consistently across multiple planning applications;
 - 3) Provides an overarching spatial masterplan to communicate development and design parameters, including land use, access, movement and green infrastructure;
 - 4) Establishes key development requirements that all planning applications within East of Halewood are expected to adhere to;
 - 5) Provides masterplanning and design principles and guidance, to inform the more detailed design considerations and approaches needed to deliver the vision for the site;
 - 6) Describes the proposed approach towards delivery and phasing of physical infrastructure; and
 - 7) Provides a framework for legal agreements and conditions to be established through the planning process.

Structure of the masterplan report

Chapter 2 Vision

Establishes the comprehensive development vision for the SUE and the placemaking principles that underpin it.

Chapter 3 The site

Introduces the site, its wider setting, and the key baseline constraints and development opportunities.

Chapter 4 Policy context

Summarises the national and local planning policy framework and specifically relates the content of this masterplan report to the East of Halewood SPD.

Chapter 5 Masterplan framework

The spatial development parameters against which planning applications will need to demonstrate consistency. The framework establishes land use and amount; green infrastructure and public open space; movement framework and supporting infrastructure.

Chapter 6 Design guidance

More detailed exploration of how the spatial components of development will combine to create a coordinated built environment with a distinctive sense of place.

Appendix A Implementation & delivery strategy

A summary of likely infrastructure requirements arising from the development and how this will be delivered and maintained in the future. This chapter includes planning application requirements.

Supporting information

- 1.11 Supporting information has been published alongside the masterplan report including;
- Baseline report
 - Options Testing and Preferred Options Report
 - Consultation and Stakeholder Engagement report
 - Draft masterplan report
 - East of Halewood Supplementary Planning Document
 - Delivery & Implementation Strategy
 - Report of Public Consultation
 - Technical Appendices

Key guidance

1.12 For ease of reference, the most important content of the masterplan is framed within “key guidance” boxes - see sample below. Applicants will need to;

a) demonstrate how their proposals are consistent with these specific elements of the masterplan report or;

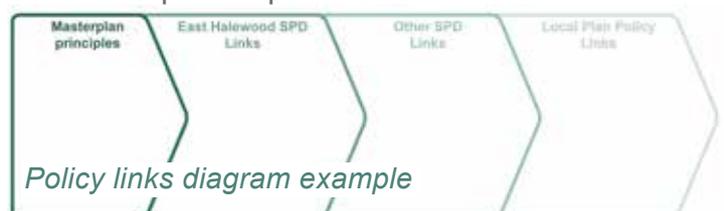
b) adequately demonstrate how their design interpretation of the masterplan guidance (see Chapter 06) accords with the masterplan framework and parameters.

key guidance example

Future development at East of Halewood will be delivered within the development area identified in the Framework Plan in Figure 5.4. Development will integrate the uses and amount of development, infrastructure and open space set out in Table 4.

Transparent policy links

1.13 Within chapters 5 and 6, a diagram is used to summarise how content is linked to - and aims to support - complementary objectives and context articulated via masterplan principles (see Chapter 2) and policy framework (see Chapter 4). This demonstrates a consistent thread that grounds the masterplan requirements.



> Vision

East of Halewood will provide a high-quality and distinctive new residential offer for Halewood; a place served by excellent infrastructure and accessible to all. It will be the most sought after and significant scheme of its type in the south of the City Region.

Vision concept

East of Halewood will become:

- A place that is **seamlessly connected with the local community** and its existing facilities, while delivering new amenities for wider community use;
- A place which is **integrated with the surrounding natural environment** through its own attractive open spaces. The **retention and enhancement of Finch Woods** will provide a focal point for the development and will be **a purposeful and attractive green space that is a destination** in its own right;
- A place that is well connected with a **high quality and accessible streetscape and hierarchy** that allows residents and visitors, whether on foot or in a vehicle, to **safely and easily navigate** their way to and around the development, whilst also improving the existing highway network and creating safe and convenient links across existing streets;
- A place where all residents and visitors are encouraged to **make the most of outdoor life**, offering opportunities to unwind, access quality greenspace and explore, encouraging an active lifestyle for Halewood and;
- A place with a **strong and interesting edge to Halewood**, integrating new homes with existing hedgerows, movement routes, residential communities and the country side beyond.



Figure 2.1 Vision concept diagram

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Realising the vision concept: placemaking principles

To achieve the vision, development will be shaped by a series of common masterplan principles that will help to unify East of Halewood through a coherent sense of place.

1. Connectivity

Easy to get to and move through



C1

A street layout that looks outward, connecting meaningfully to the rest of Halewood and addressing the urban edge; as well as inward, addressing its internal streets and spaces.

C2

Sustainable links to connect people to employment, to recreation opportunities and to local services and facilities; these should be provided and should accommodate a variety of modes of transport.

C3

Possibilities for connections between the parcels to the north and south of the railway line.

2. Facilities

Services to support a growing community



F1

Reinforce existing local centres and support independent businesses.

F2

Future proofed physical and social infrastructure, which is designed to meet the current and future needs of the community it serves.

3. Housing

Homes for a mixed and sustainable community



H1

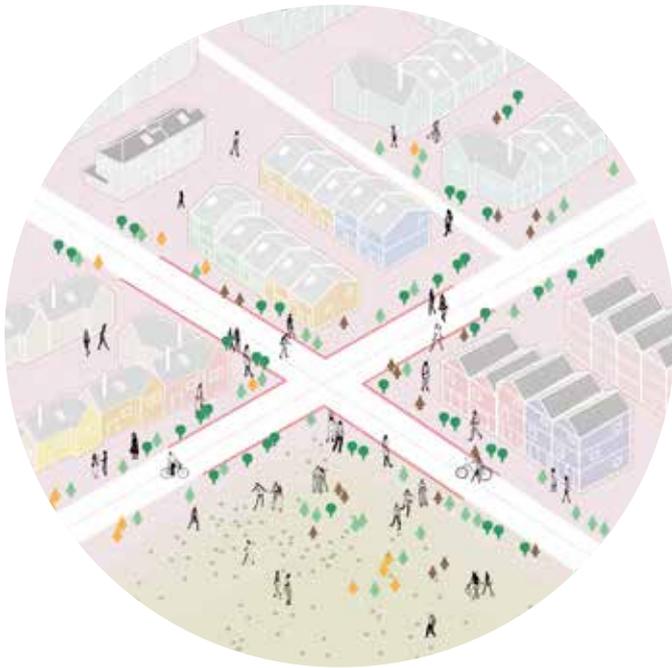
Housing types and products, including affordable housing, that can attract a range of new people to live in the area and help to address current local and City Region needs.

H2

The right homes in the right places.

4. Built form

A place of quality and character



B1

A high quality built-form that makes a positive impact on Halewood.

B2

Creating character areas and responding to context.

5. Public realm

People-focused streets and purposeful and usable open spaces



P1

A network of well-connected green spaces with a strong purpose.

P2

Creating a coordinated and balanced streetscape, that promotes walking and cycling.

P3

People focused street design and calming traffic speeds.

P4

Incorporating sustainable urban drainage solutions.

P5

Incorporating landscape features as part of the built environment.

6. Comprehensive development

Maximising the opportunity



CH1

A masterplan which positively considers the whole of the site.

CH2

Ensuring appropriate and effective phasing and delivery.

> The site

Knowsley

Knowsley's excellent motorway and rail connections place it just 15 minutes from Liverpool City Centre and 30 minutes from Manchester. The Borough has three distinct town centres - Prescot, Kirkby and Huyton - and it has a network of outstanding green spaces.

Knowsley is part of the Liverpool City Region, a functional economic area with an economy worth £28 billion. This makes City Region partnerships vital, and so Knowsley plays an active role working with the Combined Authority and Local Enterprise Partnership to deliver large-scale strategies on transport, housing, economic development and skills.

The Borough is fully engaged in the ongoing discussions with government to implement the City Region's devolution agreement: this has unlocked additional funding of over £1 billion to promote growth and development locally and will enable decisions in key areas to be taken locally by those best placed to do so.

3.2 The site lies on the eastern edge of Halewood, which is the smallest of the Borough's four townships with a population of just over 20,000. Halewood has strong connections to the City of Liverpool, and is in many ways a continuation of the city suburbs. To the north and east of the site is open countryside, with the built-up areas of Widnes in Halton, further to the east.

3.3 The site has excellent connections to the rest of the City Region and beyond, particularly via the A5300, M62, M57 and M56 via the Mersey Gateway. Development within the site will become part of the buoyant South Liverpool housing market, with good access to popular locations such as Woolton, Calderstones and Sefton Park, as well as the cultural, retail, leisure and employment offer of the city centre.

3.4 Most of the site is currently in agricultural use, although there are some existing buildings including the Merseyside Dogs' Home, houses and farm buildings on Lower Road, Finch Woods Academy, and the RSPCA Liverpool branch on Higher Road. To the west are established residential neighbourhoods, including the district shopping centre of Halewood. To the east are Everton FC's Finch Farm training centre and Halewood Caravan Park on Lower Road.

The Site

3.1 The East of Halewood site extends to approximately 80 hectares (ha), comprising two principal parcels separated by the Liverpool - Manchester rail line (30ha to the north of the rail line and 50ha to the south). The site is a single strategic development opportunity to be coordinated by a comprehensive masterplan.

Issues and opportunities summary

3.5 A summary of key issues and constraints, and key strengths and opportunities is set out over the following pages, drawn from a comprehensive baseline assessment.

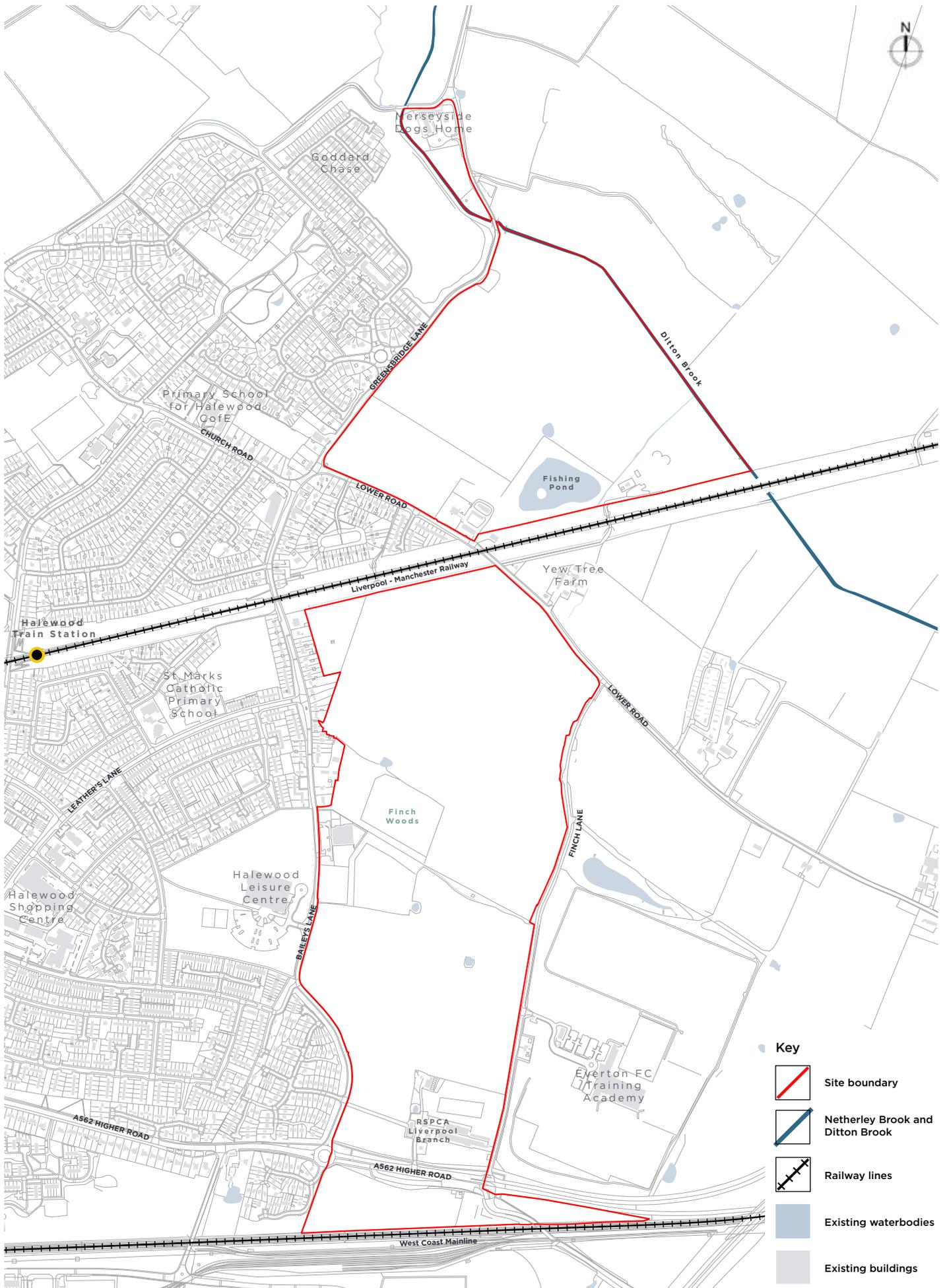


Figure 3.1 East of Halewood site
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Key issues and constraints

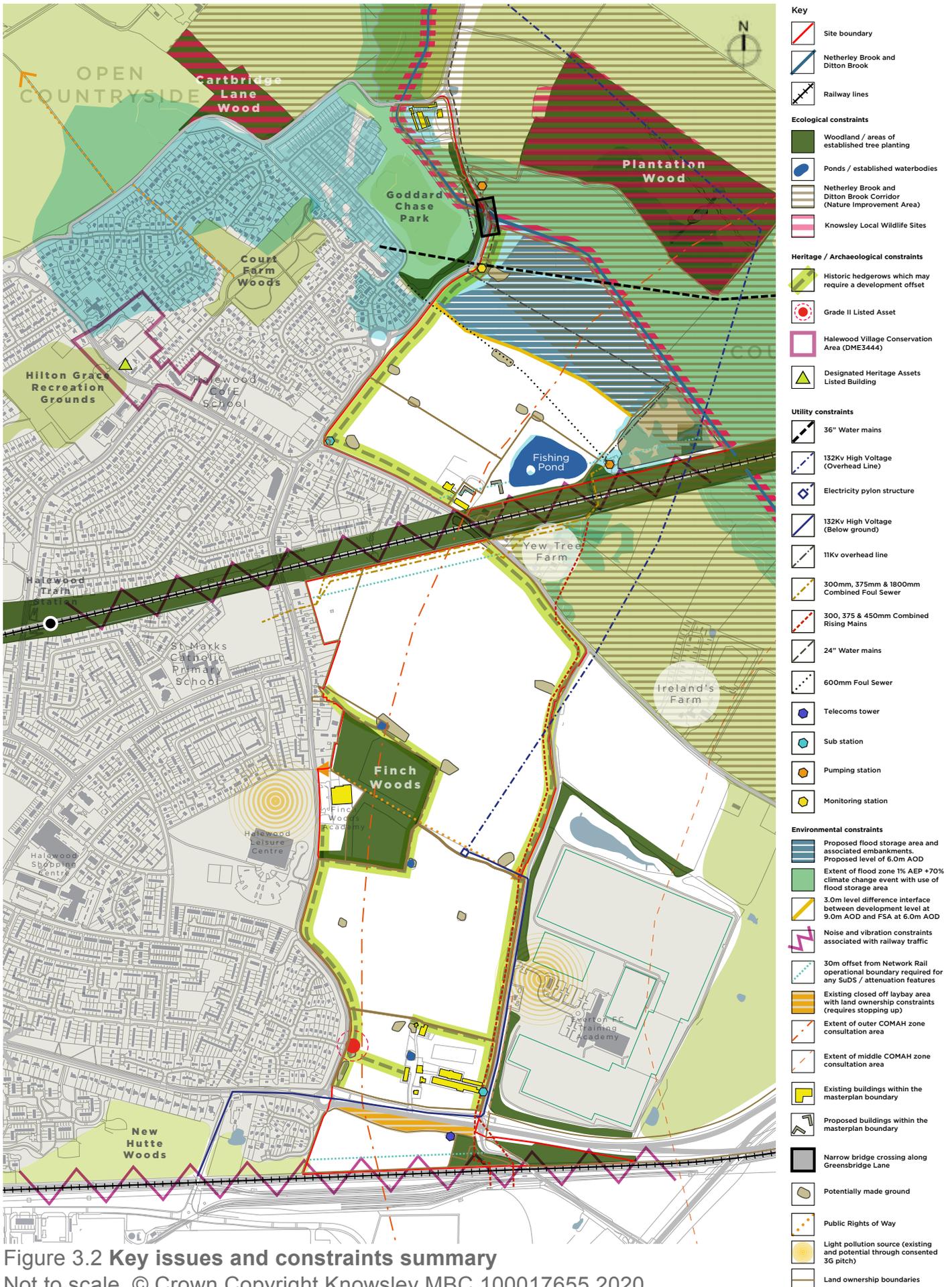


Figure 3.2 Key issues and constraints summary
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Theme	Summary of constraints
Geo-environment	<ul style="list-style-type: none"> • A high level baseline assessment indicated some localised areas of made ground around the existing in-filled ponds. More detailed site investigations will be required to support future planning applications. Land Contamination Assessment will be required at application stage
Noise	<ul style="list-style-type: none"> • Likely noise impacts from the surrounding existing highway infrastructure, namely the A562 Higher Road; • No significant noise or vibration impact associated with the Manchester to Liverpool railway line; • The Hesketh Land parcel, to the south of the site, is impacted by noise and vibration from the West Coast Mainline. The current baseline position assumes that a 50m offset is created from the railway line as an area where typical, residential development could not be delivered without mitigation to form / building openings / acoustic screening and bunding. This serves as a baseline position until further, more detailed assessments are carried out. The parcel is also impacted by operational noise and vibration from the Jaguar Land Rover facility to the south of the West Coast Mainline. The nature and extent of any mitigation or development offset may be required in response will be determined at the planning application stage; • The Merseyside Dogs Home as a continuing noise source if it remains in situ; • The RSPCA facility has closed and no longer presents a noise constraint; • The Everton Training Academy training pitches is most likely a source of noise when in use as well as a light pollution source when the floodlights are in use. Similarly, there is likely to be both a noise and light source from the Leisure Centre with the consented 3G outdoor pitch. The full extent of the noise impact for both is to be determined at the planning application stage.
Air Quality	<ul style="list-style-type: none"> • No Air Quality Management Area is declared, however there are a range of potential sensitive receptors identified in close proximity to the site. These are subject to a more detailed assessment through future planning applications; • Potential for adverse air quality impacts arising from construction process and during site occupation caused by exhaust emissions.
Utilities	<ul style="list-style-type: none"> • The overhead (o/h) 132KV power line runs north-easterly across the site, crossing Lower Road and the Liverpool – Manchester railway line and United Utilities compound. It runs below ground from the PRoW and along Finch Lane and southwards to Jaguar Land Rover and requires a 5m setback. If the o/h section of the powerline is to remain in situ, it severs the potential developable area and creates challenging visual and built form relationships with new residential development and open spaces; • 36” Rising Main steel pipe runs along the northern parcel of the site. This is identified by United Utilities as a significant piece of infrastructure, with substantial challenges facing it’s diversion or alteration with an 8m easement strip required. Consideration must be given to any future use of the site in proximity to the pipeline (i.e. Flood Water Storage area) as the pipeline’s position and depth will impact the function and design of future uses which are proximate to it; • A combined foul sewer runs to the southern extent of the Manchester - Liverpool railway and requires a 10m setback from the rail line, within which a 7m protective strip is required; • Combined Rising Mains run along the eastern boundary of the site, to the west of Finch Lane and require a 7m protective strip; • A 11kv power line runs along the northern extent of the northern parcel, crossing Greensbridge Lane and the smaller western parcel; • A foul wastewater pipe runs east to west through the northern parcel of the site to a pumping station before passing along the northern boundary of the central parcel. A 7m easement strip is required or re-provision could be incorporated within a residential layout.

Table 3.1: Summary of issues and constraints

Theme	Summary of the constraints
Utilities (cont.)	<ul style="list-style-type: none"> • A sub station located at the south-west corner of the northern parcel occupying a visually prominent part of the parcel. The location may also present a spatial constraint to necessary highways works associated with the SUE. Initial discussions with Scottish Power suggest that this could be relocated to the centre of the new load generating area; • Responses from utility providers have indicated that new development will require network upgrades and reinforcement will be required which will incur costs to complete; • Plans for the future use of the United Utilities compound is currently unknown and creates visual issues when considered in proximity to residential development. This facility will require continued access by United Utilities; • A telecommunications tower is located to the south of Lower Road, within the southernmost land parcel.
Flood Risk & Drainage	<ul style="list-style-type: none"> • Flood zones 2&3 encroach significantly into the northern parcel from the Ditton Brook; • Flood modelling work has been undertaken by Waterco to reduce the area affected by 1:1000 (+ 70% for climate change) flood event. The mitigation approach is to create a Flood Storage Area to the south of the Ditton Brook at 6m Above Ordnance Datum (AOD). The created development area is raised out of the flood risk area and sits at a level of 9m AOD; • The embankments along the Ditton Brook, which are recognised as major flood defenses in the area, are identified as being in very poor condition. • Any attenuation ponds should be located at least 30m from the existing operational boundaries of both railways. No proposal should increase Network Rail's liability. To ensure the safe operation and integrity of the railway, Network Rail issues advice on planning applications and requests conditions to protect the railway and its boundary; • Existing ponds are potential assets for future development and which should be integrated within any future layout design wherever possible. The character of retained ponds should remain, ensuring future attenuation basins are hydraulically separated from existing water features. • The site extent is located within a Source Protection Zone (SPZ) 1,2 & 3 for a potable public water supply and as such is located within an environmentally sensitive location. The presence of a source protection zone reduces drainage options and requires any drainage schemes to be designed to a higher design quality than standard.
Heritage & Archaeology	<ul style="list-style-type: none"> • A grade II listed heritage asset, along the western edge of the southern parcel along Baileys Lane, is identified as the grave of 'Blackie the Warhorse'; • Historic hedgerows identified along boundaries of northern and central parcels; • The masterplan should consider the development response in relation to buildings with local historic interest, both within and beyond the site. These include historic buildings within the RSPCA parcel (such as remaining barn elements of an 18th century farm and a pet cemetery) as well as a number of historic properties along Baileys Lane and lower part of Greensbridge Lane; • An Archaeological and Heritage Assessment will be required to accompany any future planning application. Pre-determination archaeological evaluation of the site through a variety of non-intrusive and intrusive techniques should be used to better understand any above and below ground archaeological constraints.
Transport	<ul style="list-style-type: none"> • Limited potential for pedestrian connection between the northern and southern parcels due to infrastructure barriers, namely the elevated position of the Liverpool – Manchester railway line and its associated embankment; • A562, Finch Lane/Higher Road junction is restricted in terms of site access potential. It also creates a significant barrier to pedestrian connectivity between the southernmost parcel of land and the current RSPCA land. There are no footpaths on Finch Lane north of Finch Farm access. Similarly there is limited pedestrian footpath provision along Greensbridge Lane and Lower Road, with footpath provision on one side. Everton Football Club Training Academy currently takes access from Finch Lane and future proposals will need to consider any impact on club access requirements; • Existing properties fronting along Baileys Lane limit access to the parcel; • Existing PRoW cuts across central parcel from Leisure Centre/Baileys Lane towards Finch Lane;

Theme	Summary of the constraints
Transport (Cont.)	<ul style="list-style-type: none"> • Signalised narrow bridge with no pedestrian facilities on Greensbridge Lane;a package of off-site junction and route improvement works will be required in order to mitigate against the impacts of new development; • Local bus services to East of Halewood run along Baileys Lane until Leathers Lane, excluding the southern portion of the masterplan. Areas to the south-eastern corner of the masterplan are currently beyond a 10 minute walk to Halewood train station. The frequency of services to and from Liverpool and Manchester to the station is low.
Ecology	<ul style="list-style-type: none"> • Invasive species have been noted on the site and a Management Plan is advised; • The Netherley Brook and Ditton Brook Corridor is allocated as a Nature Improvement Area (NIA) which looks to incorporate ecological priorities including habitat creation and management. The masterplan should look to avoid any built development within the NIA and a development buffer will be required from the NIA in response to ecological habitats within the corridor; • Walking trails should be kept at a sufficient distance from the top of any watercourse or ecological features so not to increase the potential for disturbance to existing and newly created wildlife habitats. In terms of Ditton Brook this should be a minimum of 8m from the top of bank; • Existing ponds have been identified as potential habitats for protected species and further investigation will be required; • Finch Woods, pockets of woodland to east of Leathers Lane/Baileys Lane and rail corridor with broadleaf and deciduous species identified as potential habitats.
Landscape	<ul style="list-style-type: none"> • The Netherley Brook and Ditton Brook are also designated as Local Wildlife sites as it provides habitat for water vole. Cartbridge Lane Wood is also designated as it is a broadleaf woodland which supports bluebell as well as reports of water vole; • Existing woodland and historic hedgerows serve as landscape features across the site; • Nature Improvement Area along the Ditton Brook encroaches into northern parcel. Consideration to the provision of an adequate buffer will be required.
Townscape	<ul style="list-style-type: none"> • The masterplan should consider how future development will integrate with its existing edges, which range from existing residential development along Higher Road, properties which back onto the site from Baileys Lane as well as Finch Woods Academy and the character of Finch Lane; • The existing built form of East of Halewood faces away from site. Combined with the presence of high, historic hedgerows, the masterplan must consider how future development can become part of an overall cohesive environment across East of Halewood.
COMAH	<ul style="list-style-type: none"> • The majority of the site falls under regulations as set out under the Control of Major Accident Hazards (COMAH) consultation zone. Residential development is identified as level 3 sensitivity ('Do not advise against'), however schools, nurseries and creches, which exceed a total site area of 1.4ha are classified as having a sensitivity level 3 and would not be supported by the HSE. Restrictions would also apply to institutional residential uses such as extra care or residential care home.
Education	<ul style="list-style-type: none"> • Halewood has a wide range of schools and nurseries, including a secondary school, six primary schools and numerous nurseries, as well as Finch Woods Academy, a SEND (Special Educational and Disability Needs) school within the East of Halewood site. Schools within Liverpool also provide spaces for children living in Halewood; • Capacity in the three nearest primary schools to the site - Plantation, St.Mark's and Halewood CofE - is limited. To meet need arising from the development for primary and early years' places, extended capacity will be needed; • The Local Education Authority has advised that the development will generate a need for 450 primary school places, and a need for 58 early years and childcare places (based on 1500 home capacity).

Theme	Summary of the constraints
Health	<ul style="list-style-type: none"> • Halewood is well served by existing GP surgery facilities, and by nearby hospitals in Whiston and Liverpool; • To meet additional GP service demand arising from the East of Halewood site, additional surgery capacity will be required. • The Knowsley Clinical Commissioning Group has advised that capacity for additional consulting rooms can be provided through refurbishment of space at the Halewood Centre.
Public Open Space	<ul style="list-style-type: none"> • Halewood generally is well served by a number of public open spaces, across the parks and gardens, amenity greenspace, children and young people, and allotment typologies. However, parts of Halewood suffer a deficit in different typologies; nearest to the East of Halewood site, there is a particular shortage of parks and gardens spaces. The East of Halewood site will need to be self-sufficient in public open space, against the Council's standards for provision; • Finch Woods public open space is within the site, and must be retained for this use. The area is currently under used, with poor public access and surveillance, and under-maintained woodland areas dominating the site; • The outdoor area of greenspace that surrounds the Halewood Leisure Centre contains some outdoor sports facilities. The proposed pitch expansion at Everton Training Academy training pitches will have no community access and will be exclusively for the use of the football club's affiliated sports programmes. Against the Council's standards, there is a deficit of pitches in the area, which means the East of Halewood development will need to make a contribution towards the provision of new/improved pitches.

Key strengths and opportunities



Figure 3.3 Key strengths and opportunities summary
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Theme	Key opportunities to be maximised
Geo-environment	<ul style="list-style-type: none"> • Relatively flat, previously undeveloped site with limited underground constraints identified, allowing for flexibility in the provision of developable areas across the site; • Ground conditions favourable for typical residential foundations.
Noise	<ul style="list-style-type: none"> • The majority of the site is not impacted by noise constraints. The most significant noise constraints impacting the Hesketh land parcel can be overcome through a range of mitigation measures, including landscape bunds if necessary. Depending upon the type of development brought forward, there is potential to successfully incorporate bunding into a wider, cohesive landscape structure.
Air Quality	<ul style="list-style-type: none"> • Generally good air quality within the study area, with air quality monitoring confirming that there were no exceedances of the relevant air quality standards in this location.
Utilities	<ul style="list-style-type: none"> • Main utility constraints run through the north parcel where development stand-off is already likely to be required for flood risk and Nature Improvement Area mitigation reasons; • Ongoing discussions with utility providers are underway and an agreement to the principle to divert and underground the 132KV overhead cables has been reached. This maximises the available developable land and reduces the risk of unsightly and visually dominant power cables; • Ongoing discussions with utility providers are underway to relocate the existing substation on the corner of Greensbridge Lane and Lower Road to a more suitable location and to facilitate highways improvements in this location; • Existing network of services in close proximity to the site providing a variety of viable connection points to the existing network infrastructure.
Flood Risk & Drainage	<ul style="list-style-type: none"> • Very low risk of flooding (Flood Zone 1) across the site area, south of Lower Road; • Only localised areas of surface water flooding due to localised depressions in the land form, which can be regraded through future development; • Potential to use the proposed Flood Storage Area to create an improved landscape setting and potentially an area for ecological / habitat improvement along the Ditton and Netherley Brook corridor and within the Nature Improvement Area; • Opportunity to establish a variety of Surface Water Drainage approaches across the entirety of the site, which are integrated with the landscape framework and a potential exemplar in surface water drainage management.
Heritage & archaeology	<ul style="list-style-type: none"> • Opportunity to celebrate the location and heritage of the grade II listed 'Blackie the Warhorse' gravestone, sustaining and enhancing its significance; • Opportunity to consider the re-use of the 18th century barn as part of the RSPCA site as part of new development proposal; • Draw upon the character / local vernacular of older buildings within the area reflected through a responsive materials palette and architectural detailing, especially in visually prominent and key locations.
Transport	<ul style="list-style-type: none"> • Reconsider role and nature of Baileys/Greensbridge Lane, around the Leisure Centre and the junction with Greensbridge Lane and Lower Road, to establish a stronger relationship with rest of Halewood and help to redefine the currently disjointed urban character along Baileys Lane and Lower Road; • Work the existing PRow into a new pedestrian and cycle movement network across the entirety of the site; • Potential to draw upon or reinforce the accessible existing public transport links serving existing residents and Halewood Shopping Centre;

Table 3.2: Summary of key opportunities

Theme	Key opportunities to be maximised
Transport cont.	<ul style="list-style-type: none"> • Opportunity to close Higher Road layby to the north of Hesketh land parcel and consolidate the land gained for future development as part of the Hesketh land parcel; • Open up a currently redundant railway arch adjacent to Lower Road to create a pedestrian and cycle connection between the northern and southern masterplan parcels; • Opportunity to re-configure Higher Road and provide junction upgrades to reduce vehicle speeds, to better manage vehicle movements and conflicts as well as improving the character of the highway in response to future development coming forward. As part of the proposals, improved accessibility could also be achieved for the Hesketh parcel; • Reinstate the disused bus stop along Greensbridge Lane.
Ecology	<ul style="list-style-type: none"> • The existing Finch Woods and ponds are potential features that the development can react to, creating areas of interest and character, which sit within a coherent landscape structure; • Usage of the Flood Storage Area to create an improved landscape setting and potentially an area for ecological / habitat improvement along the Ditton Brook and within the Nature Improvement Area.
Landscape	<ul style="list-style-type: none"> • Finch Woods can sit at the heart of a landscape structure. The woods could be redefined, altered and improved to provide a positive, high quality landscape destination within the masterplan for new and existing residents of Halewood to enjoy; • The existing PRow could form basis for new green corridors; • Historic hedgerows can be worked into the scheme to provide visual shelter from busier roads which surround the site; • The Flood Storage Area can serve a dual purpose in providing an improved landscape setting for future development, which provides a buffer area to the Ditton Brook, as well as creating positive visual amenity to the north, complementing long range views towards Plantation Wood; • Long range views from the northern portion of the site are framed by Plantation Wood and could offer an attractive setting for future development; • Opportunity to widen the existing central reservation along Higher Road to create a more substantial landscaped / planted feature as part of potential improvements to Higher Road.
Townscape	<ul style="list-style-type: none"> • Existing strong boundaries to the site can be worked into development form; • Lack of any overriding architectural style or built character in the surrounding area and the positive acceptance of recent new development offers the opportunity to define a distinctive new character for East of Halewood, through the delivery of good quality, modern housing; • Some architectural detailing cues visible from historic barns and cottages in the area, could be re-interpreted and integrated within the design finishes of the new forms of housing, as an acknowledgment of the local vernacular of Halewood; • Opportunity to establish positive edges to the site, namely along Higher Road, Lower Road, Finch Lane and Greensbridge Lane, creating an arrival experience to Halewood Village from the east; • Opportunity to redefine the character of Baileys Lane through the introduction of new development frontage which is orientated onto the existing street;

Theme	Key opportunities to be maximised
Townscape cont.	<ul style="list-style-type: none"> • Opportunity to introduce higher density development at each end of Higher Road, establishing a gateway and built form presence onto this approach link to East of Halewood; • Future development should positively address Finch Woods and incorporate it within the wider masterplan. There is an opportunity for the townscape response along Finch Woods to create a unique placemaking character through the use of a larger format, more bespoke dwelling type that fronts onto the woodland.
Education	<ul style="list-style-type: none"> • The development of the East of Halewood site brings significant opportunities for investment and expansion of existing primary schools and early years' facilities in Halewood.
Health	<ul style="list-style-type: none"> • New GP services can be provided at existing health care sites, including the Halewood Centre which is a short walk and easily accessible from the East of Halewood site; • There are other opportunities to incorporate health-focused initiatives within the East of Halewood site, including walking/cycling routes and recreation opportunities.
Public Open Space	<ul style="list-style-type: none"> • Finch Woods is an existing public open space within the site that offers a significant opportunity for investment and upgrading, to better serve existing and new residents. • The extent of other public open spaces required within the site, especially the park and garden space typology and including for drainage, easements and attenuation purposes, presents a significant opportunity for delivery of new green infrastructure and connected public open spaces. • Halewood Leisure Centre is directly adjacent to the site, offering a variety of sporting and leisure activities. The centre has proposals to expand its offer to include indoor play uses and new outdoor sports facilities. The Leisure Centre sits within a large landscaped sites, offering further opportunities for investment and upgrading of facilities.



Figure 3.4 Characterful former dairy farm along Baileys Lane

Summary of land ownerships

3.6 The East of Halewood allocation currently comprises 19 land ownerships according to Land Registry data. This includes Finch Woods which is under KMBC ownership, as well as areas of unregistered / unidentified land ownerships.

3.7 House builder developers (Bellway Homes, Miller Homes and Redrow Homes) have engaged with a number of the landowners with the ambition of delivering land parcel(s) through subsequent planning applications.

3.8 The scale and comprehensive coverage of the land ownerships has the potential to facilitate a connected and integrated development across the SUE. It is essential to consider and coordinate all land ownerships as part of a comprehensive approach.

3.9 The distribution of ownerships and current developer interests is illustrated on the adjacent land ownerships plan and described in the table below (based on information available at the time of publication).

Parcel Group	Current land owner	Developer	Area (Ha)	Current Use
1	Parcel A	TBC	1.09	Dog Rescue Centre
1	Environment Agency	TBC	0.23	Woodland
2	Parcel B	Redrow Homes	15.71	Agricultural use United Utilities 36" Water Mains pipe traverses
2	Parcel C	Bellway Homes	4.23	Agricultural use and occupied dwelling
2	Scottish Power	TBC	0.02	Electrical substation
2	United Utilities Water Ltd (west)	N/A	0.09	Waste water pumping station
2	United Utilities Water Ltd (east)	N/A	2.46	Waste water pumping station and scrub land
2	Parcel D	TBC	2.40	Occupied dwellings, fishing pond
3	Parcel E	Redrow Homes	20.34	Agricultural use Scottish Power O/H 132KV Power Lines
3	Parcel F	TBC	0.97	Scrub / woodland
3	Parcel G	TBC	0.27	Scrub / woodland & occupied dwelling along (Baileys Lane)
3	Parcel H	Bellway Homes	12.28	Agricultural use
3	Former RSPCA Liverpool Branch	Miller Homes	4.57	Derelict pet rescue centre & dwellings, paddocks, Grade II Listed Building
3	Knowsley Metropolitan Borough Council (Finch Woods)	N/A	3.95	Woodland
3	Adelaide Academy Trust (KMBC Freehold)	N/A	1.08	SEND School
4	Hesketh Estate	TBC	2.53	Paddocks
4	Unregistered land (layby)	TBC (Developer who delivers Hesketh Estate Land)	0.4	Layby and verge
4	P Holmes Properties Ltd	N/A	0.15	Mobile phone mast
4	Cheshire East Borough Council	N/A	0.71	Scrub / woodland
4	Network Rail	TBC	0.26	Scrub / woodland
N/A	Unregistered / Unidentified	N/A	0.46	
Area separating parcels 2 & 3)	Network Rail	N/A		Railway infrastructure and arches

Table 3.3: Summary of land ownerships and known developer interests

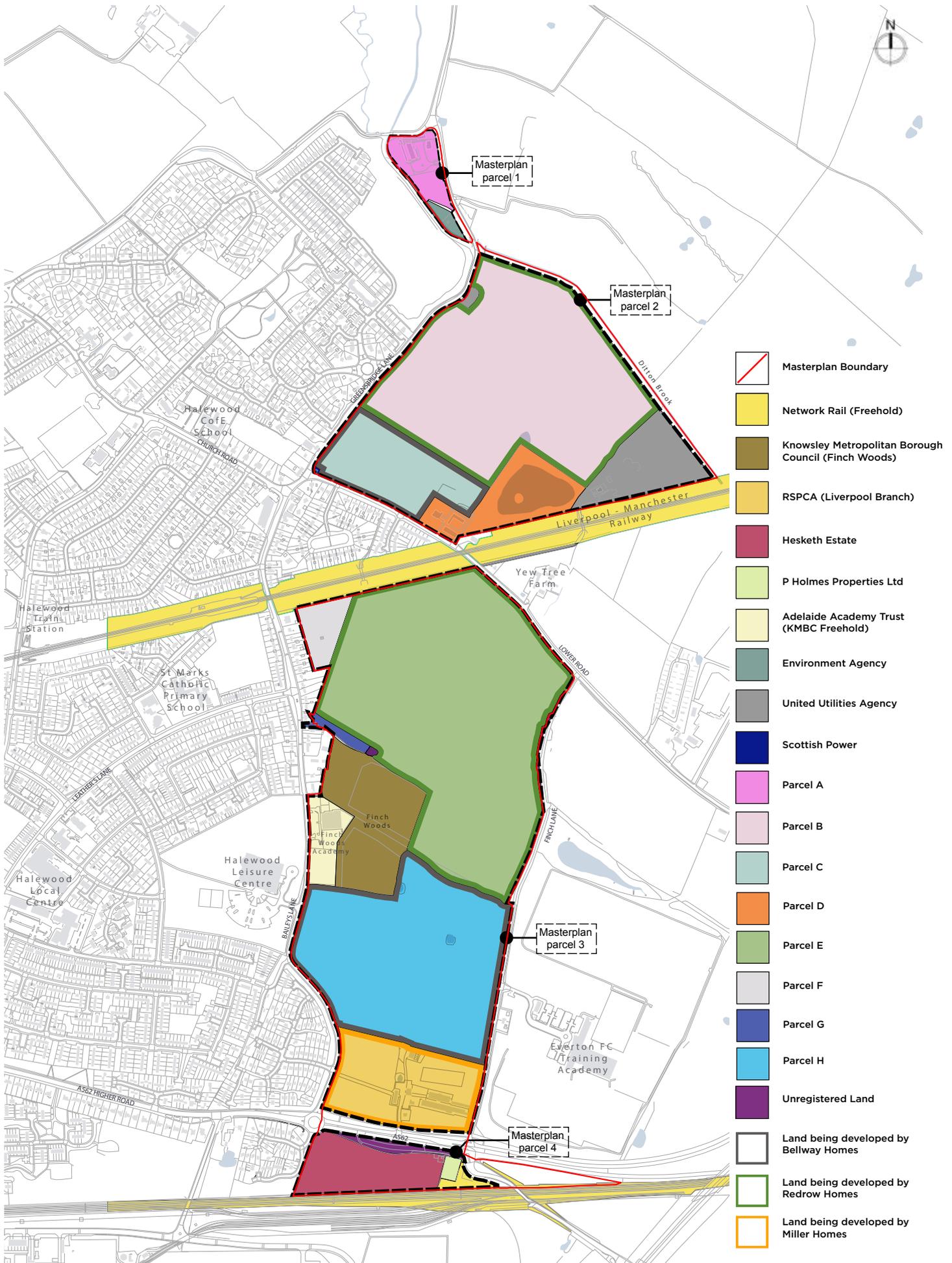


Figure 3.5 Existing land ownership (as of date of publication of this document)
 Not to scale. © Crown Copyright Knowsley MBC 100017655.2020

Strengths, weaknesses, opportunities & threats (SWOT) summary



Strengths

- site removed from Green Belt and allocated for residential development;
- relatively flat previously undeveloped site with limited on-site constraints which can be mitigated against;
- majority of the site has large ownership development parcels allowing for substantial areas of the site to be developed concurrently;
- proximity of major employers and site well located in terms of road and rail transport for residents to access employment opportunities;
- proximity to Halewood Shopping Centre and additional household occupation expenditure captured within local centre;
- relatively high demand for housing with moderate but stable residential values.



Opportunities

- potential to link and reinforce existing community and retail facilities and public transport links;
- use flood zone affected land to provide landscape amenity and an appropriate ecological buffer to the Nature Improvement Area;
- existing Finch Woods, ponds and PRow could form basis for a series of new green corridors;
- retained Finch Woods can become a positive and accessible landscape and ecological feature within a wider landscape framework;
- reconsider the role and nature of Baileys Lane / Greenbridge Lane around the Leisure Centre and Lower Road / Greensbridge Lane cross-roads, to provide stronger relationship with the rest of Halewood and reinforce the relationship with the local centre;
 - build on the positive acceptance of recent new development through delivery of good quality, modern housing;
 - close existing layby along Higher Road and consolidated within a future development parcel.
 - Enhance and restore the setting of the Grade II listed gravestone.
 - Opportunities to incorporate renewable and low carbon energy



Weaknesses

- railway and road infrastructure divides the study area and limits sense of north - south connection between parcels;
- treatment of current settlement edge has development facing away from site, affecting ability to create a cohesive extension;
- lingering poor perceptions relating to quality of provision within the centre of Halewood;
- noise impacts to the south of the masterplan may severely limit the viability of the land parcel being developed for family housing.



Threats

- Merseyside Dogs Home unable to find an alternative site / remain at their current facilities;
 - limited capacity in existing social and physical infrastructure may lead to unanticipated costs;
 - current pattern of residents accessing schooling outside the borough is prevented through increased competition;
- phasing of development across ownership boundaries not coordinated to achieve optimum integration with surrounding area and between parcels;
- unable to divert the 132KV overhead cables due to cost and subject to agreement with Scottish Power;
- unable to divert 36" mains pipe. Potential negative visual impact on Ditton Brook flood storage and landscape/ ecological enhancement area.

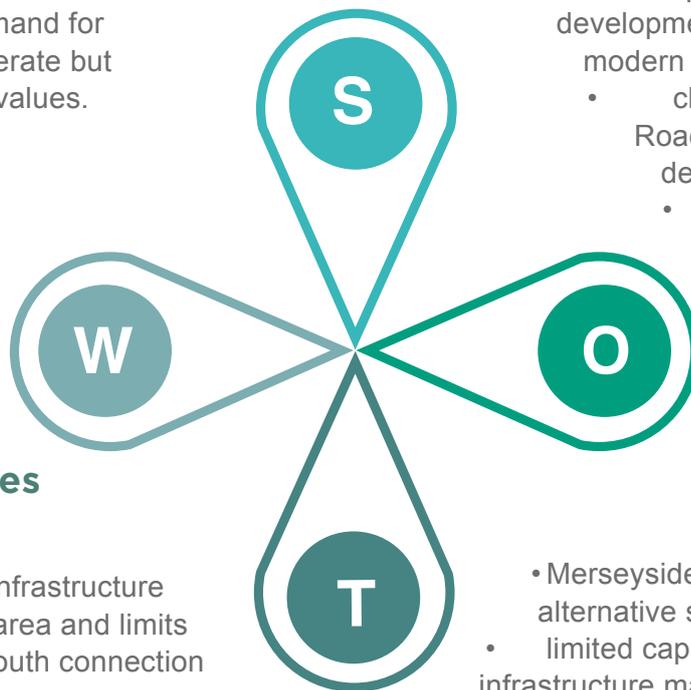




Figure 3.6 View towards Finch Woods

> Policy context

This masterplan sits within a significant policy context, both at the national and local level. The planning policy framework is outlined in Figure 4.1;

National Policy and Practice Guidance

- Revised National Planning Policy Framework (NPPF)
- National Planning Practice Guidance (NPPG)
- National Design Guide

Local Development Plan

- Knowsley Local Plan Core Strategy
- Knowsley Local Plan Policies Map
- Merseyside and Halton Joint Waste Local Plan
- Saved Policies of the Knowsley Replacement Unitary Development Plan

Supplementary Planning Documents

- East of Halewood Supplementary Planning Document
- Ensuring Choice of Travel Supplementary Planning Document
- Developer Contributions Supplementary Planning Document
- Design Quality in New Development Supplementary Planning Document
- Trees and Development Supplementary Planning Document
- New Residential Development Supplementary Planning Document
- Adding Social Value to Development: Employment and Skills Supplementary Planning Document

Masterplans

- East of Halewood Masterplan (*This Document*)

Figure 4.1 Planning policy framework summary

National Policy and Guidance

4.1 The revised NPPF and its accompanying Practice Guidance sets the Government's planning policy. Much of the content of the NPPF has been reflected in the Knowsley Local Plan and its associated Supplementary Planning Documents, including the draft East of Halewood SPD. However, the NPPF does contain specific content which is directly relevant to this masterplan report.

4.2 National policy places significant emphasis on the delivery of new housing. The NPPF states that the supply of large numbers of new homes can often be best achieved through planning for larger scale development, such as new settlements or significant extensions to existing villages and towns.

4.3 This masterplan builds upon the Council's positive allocation of East of Halewood for new residential development, and responds to the Government's objectives by providing a robust framework for a sustainable extension to the Halewood settlement, covering both infrastructure delivery and design principles.

4.4 The NPPF states that planning policies and decisions should ensure that developments meet a variety of design criteria, and:

- Will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;
- Are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;
- Are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);
- Establish or maintain a strong sense of place, using the arrangement of streets,

spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

- Optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and
- Create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

4.5 These principles are at the heart of this masterplan document. The NPPF states that plans should use visual tools such as design guides and codes, providing a framework for distinctive places, with a consistent and high quality standard of design. These should be tailored to the circumstances in each place, and should allow a suitable degree of variety where justified.

National Design Guide 2019

4.6 The NPPF states that this is particularly important for larger scale development, where clear expectations for quality should be set, along with details of how this can be maintained. This masterplan document provides such a design guide for the East of Halewood site, responding to the NPPF's content for well-designed places.

4.7 The NPPF also emphasises the need to achieve sustainable development through the planning process. This masterplan provides the specific detail of how many aspects of this requirement can be delivered in East of Halewood, including through its Access and Movement, Green Infrastructure and Sustainability Frameworks. These aim to support new development that is accessible by sustainable modes, provides opportunities for recreation, is resilient to climate change and provides ecological enhancement and mitigation.

4.8 The National Planning Policy Framework sets out that achieving high quality places and buildings is fundamental to the planning and development process. The National Design Guide (NDG) illustrates how well-designed places can be achieved and forms part of the Government's collection of planning practice guidance and should be consulted and used as a design process tool.

4.9 As well as helping to inform development proposals and their assessment by local planning authorities, it supports paragraph 130 of the National Planning Policy Framework which states that permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions.

4.10 The NDG identifies ten characteristics which need to be considered through any future development as they contribute towards the cross-cutting themes for good design set out in the NPPF. The ten characteristics of well-designed places are;

- Context - enhances its surroundings;
- Identity - attractive & distinctive;
- Built form - a coherent pattern of development;
- Movement - accessible & easy to move around;
- Nature - enhanced & optimised;
- Public spaces - safe, social & inclusive;
- Uses - mixed & integrated;
- Homes and buildings - functional, healthy & sustainable;
- Resources - efficient & resilient;
- Lifespan - made to last.

Chapter of the National Design Guide Ten Characteristics	NPPF Chapters	Chapter of the East of Halewood Masterplan Document
<p>Context</p> <p>C1 Understand and relate well to the site, its local and wider context</p> <p>C2 Value heritage, local history and culture</p>	8, 12, 14 , 15 and 16	03 The Site 03 The Site
<p>Identity</p> <p>I1 Respond to existing local character and identity</p> <p>I2 Well-designed, high quality and attractive</p> <p>I3 Create character and identity</p>	8, 12, 15 and 16	03 The Site 06f Built form and materials 03 The Site 06f Built form and materials 06a Character Areas 06g Key spaces and places
<p>Built Form</p> <p>B1 Compact form of development</p> <p>B2 Appropriate building types and forms</p> <p>B3 Destinations</p>	8, 9, 11 and 12	05b Land Use and Amount 05c Residential development 06a Character Areas 06f Built form and materials 06g Key spaces and places
<p>Movement</p> <p>M1 An integrated network of routes for all modes of transport</p> <p>M2 A clear structure and hierarchy of connected streets</p> <p>M3 Well-considered parking, servicing and utilities infrastructure for all users</p>	8, 9 and 12	05f Access and Movement 05f Access and Movement 06c Street Movement and Hierarchy 03 The Site 05g Utilities and Services 06c Street Movement and Hierarchy

Chapter of the National Design Guide Ten Characteristics	NPPF Chapters	Chapter of the East of Halewood Masterplan Document
<p>Nature</p> <p>N1 Provide high quality, green open spaces with a variety of landscapes and activities, including play</p> <p>N2 Improve and enhance water management</p> <p>N3 Support rich and varied biodiversity</p>	<p>8, 12, 14 and 15</p>	<p>05d Green Infrastructure 05e Open space requirements 06d GI & public open space</p> <p>05g Utilities and services 06d Landscape, ecology, SuDS and GI</p> <p>05d Green Infrastructure 06d Landscape, ecology, SuDS and GI</p>
<p>Public spaces</p> <p>P1 Create well-located, high quality and attractive public spaces</p> <p>P2 Provide well-designed spaces that are safe</p> <p>P3 Make sure public spaces support social interaction</p>	<p>8, 9 and 12</p>	<p>06b Urban design framework 06c Street Movement and Hierarchy 06g Key spaces and places</p> <p>06b Urban design framework 06c Street Movement and Hierarchy 06g Key spaces and places</p> <p>06g Key spaces and places</p>
<p>Uses</p> <p>U1 A mix of uses</p> <p>U2 A mix of home tenures, types and sizes</p> <p>U3 Socially inclusive</p>	<p>2, 5, 6, 7, 8 and 12</p>	<p>05b Land Use and Amount</p> <p>05c Residential Development 06a Character Areas</p> <p>Appendix A: Implementation</p>

Chapter of the National Design Guide Ten Characteristics	NPPF Chapters	Chapter of the East of Halewood Masterplan Document
<p>Homes and buildings</p> <p>H1 Healthy, comfortable and safe internal and external environment</p> <p>H2 Well-related to external amenity and public spaces</p> <p>H3 Attention to detail: storage, waste, servicing and utilities</p>	8 and 12	<p>06f Built form and materials</p> <p>06e Development Sustainability</p> <p>06c Street Movement and Hierarchy</p> <p>06d GI & public open space</p> <p>06g Key spaces and places</p> <p>06e Built form and materials</p>
<p>Resources</p> <p>R1 Follow the energy hierarchy</p> <p>R2 Selection of materials and construction techniques</p> <p>R3 Maximise resilience</p>	12 and 14	<p>06e Development Sustainability</p> <p>06e Development Sustainability</p> <p>06f Built form and materials</p> <p>06d GI & public open space</p> <p>06e Development Sustainability</p>
<p>Lifespan</p> <p>L1 Well-managed and maintained</p> <p>L2 Adaptable to changing needs and evolving technologies</p> <p>L3 A sense of ownership</p>	10 and 12	<p>06d GI & public open space</p> <p>06e Development Sustainability</p> <p>Appendix A: Implementation</p> <p>06e Development Sustainability</p> <p>06g Key spaces and places</p> <p>Appendix A: Implementation</p>

Local Development Plan

Knowsley Local Plan Core Strategy (2016)

4.11 The Knowsley Local Plan Core Strategy sets the spatial framework for the development of Knowsley up to 2028. It includes targets for 8,100 new homes and 164 hectares of employment land, along with a range of thematic and area-based policies to be applied to new development. In order to ensure a sufficient supply of development land to meet identified needs, the Core Strategy allocated former Green Belt sites for residential and commercial development.

4.12 The Core Strategy has a specific chapter for SUE sites. Policy SUE2 sets development principles for all SUE sites, and outlines site specific requirements for the three largest SUEs, of which East of Halewood is one. The policy states that for East of Halewood, the Council will prepare a Supplementary Planning Document, which will provide a proposed spatial development framework for the site, together with further details of development and infrastructure requirements. The policy goes on to state:

4.13 “Proposals for development within each of these locations [including East of Halewood] will only be granted planning permission where they are consistent with a single detailed masterplan for the whole of the SUE, which is approved by the Council. The masterplan should accord with development plan policy and any associated Supplementary Planning Document and may be submitted prior to or with any application.”

Policy SUE2, clause 4

4.14 Policy SUE2 also states that:

4.15 “Planning permissions must be linked to any necessary legal agreements for the improvement, provision and maintenance of infrastructure, services and facilities, open spaces and other matters necessary to make the development acceptable and which facilitate comprehensive delivery of all phases of development which the SUE in accordance with the single detailed masterplan.”

Policy SUE2, clause 4

4.16 This masterplan expands on the detail in the East of Halewood SPD, and sets out a framework for comprehensive and coordinated delivery of infrastructure, services and facilities, and open spaces, through its various framework plans and written guidance. The clear emphasis of the masterplan is on realising the full potential of the site through prescribing and articulating a comprehensive approach to its delivery.

4.17 Supporting text for Policy SUE2 explains that the masterplan for each SUE should demonstrate appropriate evidence of stakeholder involvement and consultation, and provide a comprehensive phased approach to the development of the SUE as a whole. The preparation of this masterplan has been subject to stakeholder input to date, and now will be subject to a public consultation period.

4.18 Local Plan policy SUE2b sets a high level development strategy for the East of Halewood site, establishing that the site is allocated for approximately 1,100 dwellings, to provide a wider choice of housing, and public open space including flood storage and mitigation measures adjacent to Ditton Brook.

4.19 This masterplan report responds to this overall strategy, articulating through its spatial frameworks, the suitable locations within the site for new residential development, in addition to the locations required for new public open space – this includes a land use response to combat flood risk in the north of the site.

4.20 The overall number of homes to be delivered exceeds the 1,100 dwellings envisaged in the Plan. However, this masterplan explains that this is due to additional areas of land becoming available, which were in alternative use during the time of Local Plan preparation (such as the RSPCA site).

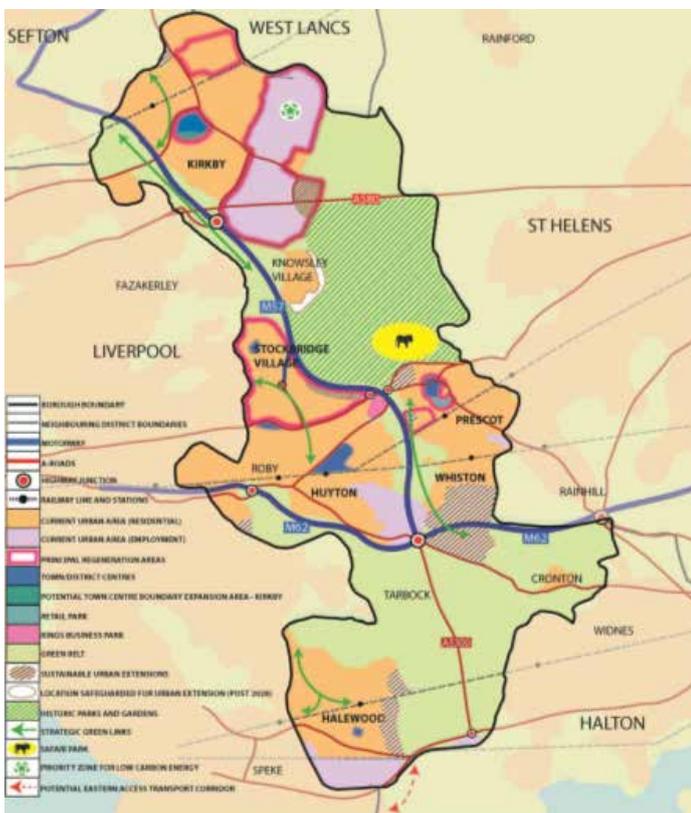


Figure 4.2 Core Strategy Key Diagram (extract from the Knowsley Local Plan Core Strategy)

Not to scale. Crown Copyright Knowsley MBC 100017655 2020

4.21 Policy SUE2a also sets out specific development requirements for the site, including:

- Safe and convenient highways access, together with a well-connected internal road system and traffic mitigation measures – *the masterplan responds to this through its access and movement framework and identification of junctions requiring improvements.*
- Provision for public transport, walking and cycling, which enhance linkages within the area – *the masterplan provides for new internal dedicated walking and cycling routes, and a new bus route.*
- Key infrastructure and services to meet needs arising from the site, and appropriate contributions to meeting requirements off site – *the masterplan provides a framework for in kind provision of infrastructure, and for developer contributions, and*
- Appropriate interface distances within the site and to existing residential areas to maintain amenity – *the masterplan considers this through its land use and urban design frameworks.*

4.22 The Local Plan Core Strategy provides a range of other policies which the masterplan has responded directly to, including:

- **Policy CS1 – Sustainable Development** – covering that the Council will take a positive approach to development, working pro-actively with applicants.
- **Policy CS2 – Development Principles** – promoting sustainable economic development; tackling the causes of deprivation and inequality; reducing carbon emissions and tackling climate change; reducing the need to travel and increasing accessibility; protect and enhance environment assets; local character and quality of plan; and making efficient use of resources and infrastructure.
- **Policy CS3 – Housing Supply, Delivery and Distribution** – covering an overall housing target, distribution of new housing (including to Halewood), and ensuring an adequate supply of housing over the plan period.
- **Policy CS7 – Transport Networks** – new development will be required to prioritise sustainable modes, and developer contributions will be required to provide improved accessibility.
- **Policy CS8 – Green Infrastructure and CS21** – Green spaces and Trees – including the protection and enhancement of strategic greenspace, ensuring delivery of quality and quantity of public open spaces, protecting and enhancing biodiversity, enhancing leisure and creation opportunities including through green links, delivering green infrastructure that helps to mitigate and adapt to climate change, including sustainable drainage systems. This also covers the replacement of lost trees within new development.
- **Policy CS15 – Delivering Affordable Housing** – provision of new affordable housing required as part of new residential development.
- **Policy CS17 – Housing Sizes and Design Standards** – mix of dwelling sizes and types sought, including design standards encouraged.
- **Policy CS19 – Design Quality in New Development** – new development will be expected to achieve local distinctiveness, identity and accessibility.
- **Policy CS20 – Managing the Borough’s Historic environment** – new development should preserve or enhance historic assets including Listed Buildings.
- **Policy CS22 – Sustainable and Low Carbon Development** – standards of sustainable design and construction sought within new development.
- **Policy CS24 – Managing Flood Risk** – flood risk mitigation requirements for new development, including the use of sustainable drainage systems.
- **Policy CS26 – Waste Management** – the need to reduce waste overall, and the promotion of sustainable waste management.
- **Policy CS27 – Planning and Paying for New Infrastructure** – infrastructure provision principles for new development and the use of developer contributions, including legal agreements.

Knowsley Local Plan Policies Map (2016)

4.23 The Local Plan Policies Map shows all of the land use designations in Knowsley. The entirety of the East of Halewood site is allocated as a SUE site, but parts of the site are also covered by the following designations:

- Local Wildlife Site – covers the Ditton Brook channel area to the north of the site, and
- Urban Greenspace and Educational Land – covers the existing Finch Woods public open space and Finch Woods Academy.

Merseyside and Halton Joint Waste Local Plan (2013)

4.24 A number of policies apply to new residential sites such as East of Halewood, including;

- **Policy WM8 – Waste Prevention and Resource Management** – covering that construction and demolition methods should minimise waste production and encourage re-use and recycling on site; provision should be made for using recycled materials in building; waste management plans should be used to monitor waste minimisation, recycling, management and disposal;
- **Policy WM9 – Sustainable Waste Management Design and Layout for New Development** – design strategies should address facilitation, collection and storage of waste, including separated recyclable materials; provide sufficient access to enable waste collection and transportation; and accommodate opportunities for composting within individual gardens.

Saved Policies of the Knowsley Replacement Unitary Development Plan (2009)

4.25 These include non-strategic policies which have not been replaced by the Local Plan Core Strategy. In general, these policies relate to detailed development management matters, however several are relevant to the East of Halewood masterplan, including:

- **Policy T5 – Location of Major Traffic**
- **Policy T7 – New Development and Walking and Cycling Routes**
- **Policy T8 – Transport Assessments**
- **Policy T9 – Travel Plans**
- **Policy T10 – Access for the Less Mobile**
- **Policy OS7 – Educational Uses and Sites**
- **Policy DQ2 – Security in the Built Environment**
- **Policy DQ3 – Gateway Sites and Corridors**
- **Policy DQ4 – Trees and Development**
- **Policy ENV2 – Noise and Vibration**
- **Policy ENV3 – Light Pollution**
- **Policy ENV4 – Hazardous Substances**
- **Policy ENV5 – Contaminated Land**

East Halewood Supplementary Planning Document

4.26 This has been drafted to meet the requirements of the Local Plan policy for the East of Halewood site.

4.27 The document includes an introduction setting out a high level vision and objectives for the site, a summary of constraints and opportunities and the relevant policy context. Following the Local Plan policy requirements outlined in this chapter, the SPD sets a high level specification for the masterplan that is required for the site (see box EH2).

4.28 This sets out that the SPD contains key guidance which both the masterplan and subsequent development proposals will need to respond to (boxes EH1-EH14). Much of this content is set out within three substantive chapters – Spatial Development Framework, Development and Design Principles, and Delivery.

4.29 Table 3.1 adjacent sets out in detail how this masterplan document responds to the SPD content, demonstrating a clear read-across between the two documents.

Other Supplementary Planning Documents

Ensuring and Choice of Travel Supplementary Planning Document (2010)

4.30 This seeks to ensure a good choice of travel modes to all new developments in Knowsley. The SPD is to be used by developers to ensure that their proposals are accessible, promote sustainable travel patterns, and minimise the congestion and pollution caused by vehicles. This masterplan seeks to respond to this approach through its access and movement frameworks and guidance. The document will be used to assess individual planning applications to ensure they deliver access to new development by walking, cycling and public transport as well as private vehicles.

Developer Contributions Supplementary Planning Document (2016)

4.31 This supplements the Local Plan policies relating to developer contributions (in particular Policy CS27). It provides further detail as to what level of developer contributions will be sought for different types of development, giving early notice to applicants so that the cost implications for development proposals can be taken into account. It also provides a framework for how the Council's policy requirements can be met in accordance with Community Infrastructure Levy legislation. This masterplan seeks to build a site-specific approach to developer contributions, responding to this SPD and the East of Halewood SPD requirements.

East of Halewood SPD content	East of Halewood Masterplan - related content
2. About the site	
The Vision for the East of Halewood SUE <ul style="list-style-type: none"> EH1: Vision and objectives 	2. Vision <ul style="list-style-type: none"> Vision concept and development principles
Constraints and Opportunities	3. The site <ul style="list-style-type: none"> Constraints and opportunities summary
3. Policy context	
Knowsley Local Plan Core Strategy <ul style="list-style-type: none"> EH2: East of Halewood masterplan 	4. Policy context <ul style="list-style-type: none"> Summary of policy framework and related objectives
Supplementary Planning Documents	
4. Spatial Development Framework	
Development parameters <ul style="list-style-type: none"> EH3: Development parameters 	5. Masterplan framework <ul style="list-style-type: none"> 05b Land use and amount
Spatial Development Framework <ul style="list-style-type: none"> EH4: Residential development EH5: Public open space EH6: Access EH7: Utilities and Services 	5. Masterplan framework <ul style="list-style-type: none"> 05c Residential development 05d Green infrastructure 05e Open space requirements 05f Access, movement and off-site highways improvements 05g Utilities and services
5. Development and Design Principles	
Design Principles <ul style="list-style-type: none"> EH8: Design principles 	6. Design guidance <ul style="list-style-type: none"> 06a Character Areas 06b Urban design framework 06f Built form and materials 06g Key spaces and places
Streets, paths and movement <ul style="list-style-type: none"> EH9: streets, paths and movement 	6. Design guidance <ul style="list-style-type: none"> 06c Movement and street hierarchy
Landscape and ecology <ul style="list-style-type: none"> EH10: Landscape and ecology 	6. Design guidance <ul style="list-style-type: none"> 06d Green infrastructure and public open space design guidance
Development sustainability <ul style="list-style-type: none"> EH11: Development sustainability 	6. Design guidance <ul style="list-style-type: none"> 06e Development sustainability
6. Delivery	
Masterplan and planning application requirements <ul style="list-style-type: none"> EH12: Planning application requirements 	Appendix A: Implementation & Delivery
Development Contributions <ul style="list-style-type: none"> EH13: Infrastructure requirements 	

Table 4.1: Relationship between SPD and masterplan report contents

Design Quality in New Development Supplementary Planning Document (2016)

4.32 This SPD sets the overarching context for design in the Borough, and highlights a range of issues which should be taken into account when designing a new development. This includes guidance relating to the location of new buildings, their density and form, accessibility, landscaping, public open space, sustainable design, minimising crime and preserving built heritage. This masterplan builds on the principles outlined in this SPD, and applies them to the East of Halewood site.

Trees and Development Supplementary Planning Document (2016)

4.33 Focussed on the incorporation of trees within new development, this SPD sets out how existing trees, woodland and vegetation should be incorporated, and sets best practice for how new trees and landscaping should be delivered as part of new developments. It also sets technical requirements for tree surveys and provision of replacement trees. This masterplan responds to these requirements by providing guidance on landscape and planting specifications for East of Halewood.

New Residential Development Supplementary Planning Document (updated 2018)

4.34 This SPD provides detailed guidance to developers on specific design issues relating to the delivery of new housing developments. This covers how such development should integrate with existing nearby development, including preserving amenity of neighbouring uses. The SPD also provides guidance on residential layouts, including access and parking, property security, public realm design, waste management and adaptability to climate change. The document was amended in 2018 to include guidance relating to the incorporation of Electric Vehicle Charging Points in new residential development.

Adding Social Value to Development: Employment and Skills Supplementary Planning Document (2018)

4.35 This recent SPD sets out the Council's expectations for developers to prepare Social Value Strategies to accompany their development proposals. This will secure benefits for local communities and businesses, through maximising the employment and training of local people through the construction phase. This will also help address a national shortage in construction skills, so directly benefit developers and their partners.

Additional context

4.36 The Council has adopted a range of other Plans and Strategies relevant to this masterplan. Most significantly, the Council's Housing Strategy sets the vision for new housing in the Borough – that it will meet the needs of existing residents, and attract economically active people to the Borough. The Strategy emphasises the need to rebalance the housing market in Knowsley, which is overly skewed towards 3 bedroom homes and social rented properties, in comparison with the regional average. SUE sites such as East of Halewood are identified as a key element of the strategy, with their potential to provide high quality new homes (including executive homes), new affordable homes, and supporting infrastructure clearly outlined. Other themes of the strategy, including self and custom build housing, supported housing, new build affordable housing and housing and health are also relevant to the East of Halewood masterplan.

Knowsley's Greenspace Strategy 2015-2020

4.37 The purpose of the Green Space Strategy 2015-2020 is to ensure that Knowsley's green spaces are seen as a viable resource; valued by commissioners and the community alike as assets that can be utilised to address the pressing social, health and economic growth challenges that Knowsley faces. The strategy focusses on a "natural approach to a thriving Borough", setting strategic policy themes including encouraging health and well-being, providing social value, contributing to economic growth and marketing the Borough, learning in the natural environment, addressing crime and anti-social behaviour, enhancing natural assets and climate change mitigation and adaptation. The strategy outlines a functionality principle for green spaces, informing a work programme for improvement and investment in existing spaces. Much of the content of this strategy is relevant to the East of Halewood masterplan, in particular ensuring that new green spaces created within the site respond to the policy themes and objectives of the Strategy.

Liverpool City Region

4.38 Knowsley is part of the Liverpool City Region, including the governance bodies of the Combined Authority and Local Enterprise Partnership. The Liverpool City Region Growth Plan outlines the overall objectives and economic priorities for the City Region, which includes improving the housing offer. The East of Halewood site sits within a southern strategic investment corridor, running through Knowsley but with strong connections to the south of the City Region, including Liverpool and Halton to the immediate west and east respectively. The East of Halewood SPD outlines that being in a prominent gateway location, the site has significant potential to connect into the buoyant south Liverpool housing market, along with existing commercial areas including adjacent Jaguar Land Rover, Ditton/Halebank in Halton, and Speke/Liverpool Airport in Liverpool.

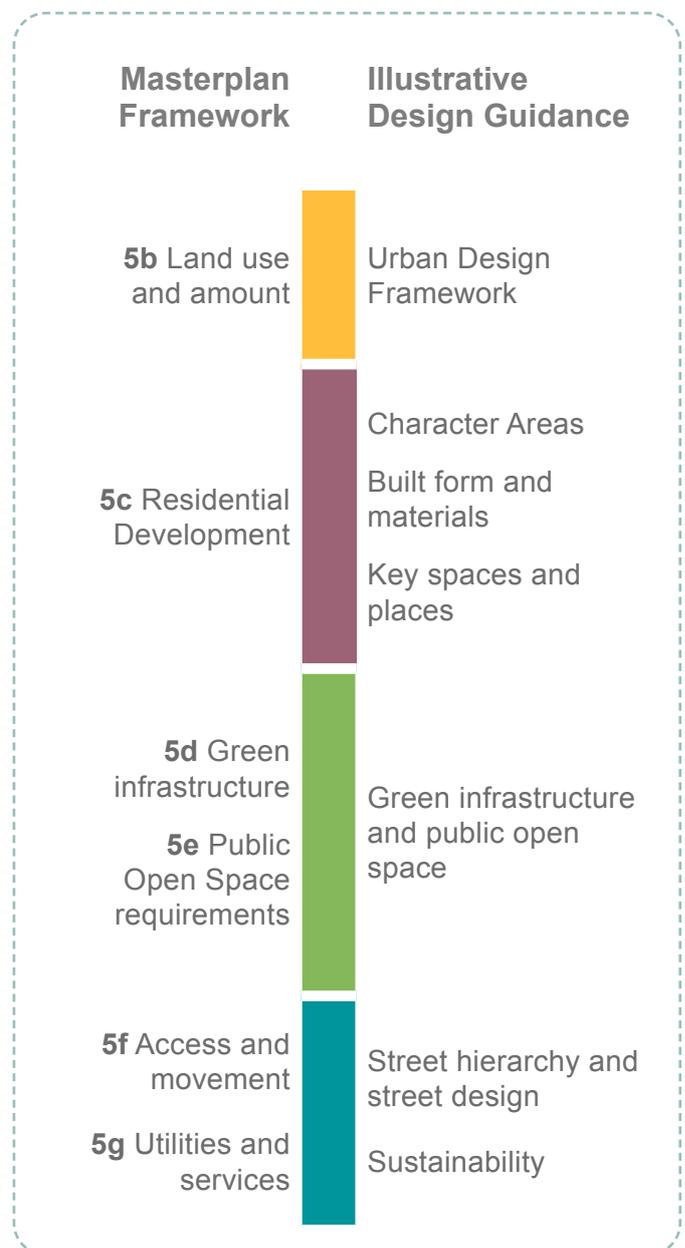
› Masterplan framework

Chapter 5 establishes a strategic spatial framework that will structure future development for the East of Halewood. This framework presents a coordinated set of parameters that will assist the delivery of policy objectives and ultimately ensure the successful creation and delivery of the East of Halewood Sustainable Urban Extension.

The delivery of these parameters will be assisted by design guidance presented at Chapter 6. This design guidance provides an indicative example of how the masterplan parameters could be interpreted and applied through considered design responses. The guidance set out in Chapter 6 is intended to demonstrate a placemaking solution which accords with the parameters of the masterplan framework.

If an alternative interpretation and design solution is presented through the planning process, which is considered equally as effective at delivering the masterplan requirements, the Council would be happy to explore these with future applicants.

The masterplan framework is presented as a series of sections that relate to design guidance as follows;



Developing the masterplan

Founded on a robust process

5.1 The masterplan framework has been shaped by an inclusive and robust options development and stakeholder engagement process.

5.2 Initially three options were prepared to exploring a distinct potential development concepts, whilst remaining consistent with the central masterplan vision and placemaking principles.

5.3 Stakeholder engagement and feedback facilitated appreciation of the relative merits and drawbacks of each option. In response, an emerging preferred option was derived: a development approach which balanced stakeholder feedback with the central vision and principles to generate a responsive proposition. The emerging preferred option was not based entirely on one single option, but integrated positive elements of all three.

5.4 For further details on the option development process and stakeholder feedback refer to the *Option Testing and Preferred Option Report*.

5.5 This process of exploring and synthesising the most positive elements of three initial options has informed a cohesive and distinctive masterplan framework. The framework is a genuine blend of development principles and parameters that were considered to be the strongest and received most support during stakeholder engagement.

5.6 The framework achieves the most beneficial balance between strategic development objectives, placemaking and urban design principles, site-specific opportunities, technical issues and constraints, infrastructure requirements and deliverability.

Knowsley Taking Action on Climate Change Climate Emergency Declaration - January 2020

In response to current and predicted levels of global warming, Knowsley have declared a programme of actions to mitigate the impact of climate change. The council will aim to reduce emissions from its own estate and services to net zero by 2040 – a full ten years before the Government's own target.

The Council has already successfully reduced carbon emissions from its estate and services by 36% since 2009. Key themes set out in the action plan include significant tree planting; increasing the use of electric vehicles in the Council's fleet, therefore reducing emissions and also the aim to increase the efficiency of council buildings, creating a reduction in energy and water use.

The Council is also committed to working with partners and stakeholders including businesses, housing providers, environmental organisations and community groups to help them reduce carbon emissions. The East of Halewood Masterplan looks to support the Council's programme of actions and will work with local stakeholders and developers to promote and secure opportunities to incorporate renewable and low carbon energy as the masterplan is developed.

The preferred option

5.7 Figure 5.1 shows the preferred option derived from the option development process described above. The main characteristics of this are:

- Direct and accessible vehicular, cycle and pedestrian linkage into East of Halewood;
- Finch Wood celebrated as a purposeful green space - a high quality landscape connected through a network of pedestrian and cycle routes;
- Purposeful linear green spaces draw out Finch Wood landscape character towards Finch Lane and Lower Road;
- New bus route between Lower Road and Baileys Lane;
- Potential downgrade to Higher Road with landscape to existing central reservation;
- Flood Storage Area becomes an ecologically enhanced and meadow landscape, offering pleasant views and quality landscape setting; and
- Mixed use development parcel sits to the south of the A562.

5.8 The preferred option represented a key milestone in the masterplanning process, and provided the founding spatial principles from which the masterplan framework has been developed and refined.

5.9 The preferred option informed the East of Halewood Masterplan – Consultation Draft, which was developed as a full draft document for consultation purposes. The introduction to the document included a vision and objectives for the site, details of site constraints and opportunities, and relevant policy context. The main part of the document was formed of a draft Masterplan Framework, covering key issues like land use, residential development, green infrastructure, open space, access and movement, and utilities and services, accompanied by spatial Framework Plans.



Figure 5.1 **Emerging East of Halewood Masterplan Preferred Option**

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Draft East of Halewood Masterplan

5.10 The draft Masterplan also included a draft Design Guidance section, setting out proposals for character areas, urban design guidance, street hierarchy, landscape and green infrastructure, sustainability, built form and materials, and “key spaces and places”. The document also included a draft implementation and delivery strategy. The document included emerging “branding” for the East of Halewood site, featuring an ident of a black horse, relating to the Listed Gravestone of Blackie the war horse.

5.11 The draft Masterplan represented a further key milestone in the development of the Masterplan, particularly as it represented the first opportunity for members of the public, and other stakeholder not involved in the early stages of Masterplan development, to view the Council’s proposals and to share their views.

5.12 The East of Halewood Masterplan – Consultation Draft was published in February 2019 for a six-week period of public and stakeholder consultation. It was published alongside supporting documents including a *Masterplan Baseline Report* and the *Option Testing and Preferred Option Report*.

5.13 The consultation materials were made available on the Council’s website and also in hard copy in the Halewood Library, One Stop Shop and Leisure Centre. Consultation letters were sent to those living in close proximity to the site, and also to those registered with the Council to receive updates on progress with documents related to the Knowsley Local Plan. Consultation events were held in Halewood Leisure Centre, to enable residents to engage with Council officers and Masterplan consultants on the content of the draft Masterplan. Consultation responses needed to be submitted in writing, or via the Council’s dedicated consultation portal:

<https://consultations.knowsley.gov.uk/EastOfHalewood/>



Figure 5.2 Draft East of Halewood Masterplan Framework diagram

Not to scale. © Crown Copyright Knowsley MBC 100017655.2020

5.14 The Draft Masterplan was consulted on alongside the Council's draft East of Halewood Supplementary Planning Document, and comments were received from stakeholders and members of the public on both documents.

5.15 Overall, 83 submissions were received from members of the public, with an additional five submissions from landowners and developers, eleven from statutory consultees, three from local businesses, and two from other respondents.

5.16 A detailed description of the consultation activities undertaken, and the full results of the formal period of consultation are available in the Consultation and Stakeholder Engagement Report. This report also sets out the full detail of the Council's response to the points raised in the consultation, and the resulting changes to the East of Halewood Masterplan. All consultation materials remain live on the Council's website as an archive resource.

Final East of Halewood Masterplan

5.17 This document is the final version of the East of Halewood Masterplan. It reflects amendments made following the consultation process, and further changes reflective of the passage of time between consultation draft and final versions of the document.

5.18 Some of the more substantial changes include:

- Inclusion of reference to the National Design Guide, published in October 2019;
- Changes to the alignment of the avenue streets off Lower Road, and to the alignment of the strategic cycleway running through the site;
- Minor changes to assumptions on the developable area within East of Halewood, including additional land availability close to the existing fishing pond, and the fact that further noise/vibration mitigation evidence will need to inform the developable area north of the West Coast Mainline;
- Inclusion of a new naming protocol for the East of Halewood street hierarchy;
- Changes to selected materials and boundary treatments within the design guide section;
- Inclusion of a more detailed layout scheme for the Listed Gravestone of Blackie the Warhorse;
- Further detail on the proposals for the main public open spaces within the site, including Finch Woods and the Flood Storage Area / area for ecological mitigation adjacent to Ditton Brook;
- Clarification about the range of developer contributions to be sought, including the “roof tax” amounts to be sought;
- Restructuring the document so that the Implementation and Delivery chapters form a separate Technical Appendix which can be readily updated as the development progresses.

5.19 Continual engagement and masterplan refinement has been ongoing through;

- Refined design development work within the Leisure Centre and Finch Woods key spaces and places to inform overall masterplan viability and delivery;
- Further engagement with statutory providers around the technical constraints and opportunities associated with the proposed Flood Storage Area informing more detailed proposals within Chapter 06 of masterplan document;
- Continued engagement with various developers with an interest in progressing sites (including formally through the planning process);
- Further PlacesMatter! Design Review to discuss and review the Masterplan Framework.

5.20 In addition to the above, the Council has produced further evidence base documents to inform the final masterplan, addressing gaps identified in the draft masterplan and in the consultation. This resulted in further changes, including:

- Clarification about the extent of off-site highways improvements needed, following the Council’s evidence base collation on this topic – see chapter 05f of this document;
- Content included summarising the economic viability appraisal of the Masterplan – see the Implementation and Delivery Technical Appendix.

5.21 Minor formatting changes and typographical corrections have been made to the document, to improve its legibility.

Land use and amount

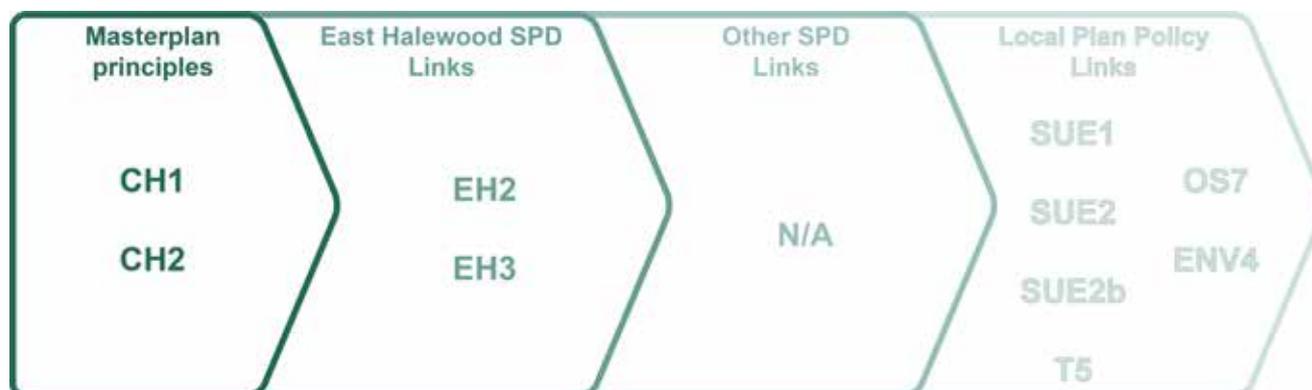


Figure 5.3 Land use and amount - links to wider objectives and policy framework

key guidance

5.22 The Framework Plan sets the basis for a high-quality and distinctive residential neighbourhood extending across this strategic site. Future development will accord with the land-use principles set out in the following chapter.

5.23 The Framework Plan establishes the fundamental structuring principles and spatial components of future development, establishing location and extents of land uses relative to key access points, movement routes, open space and existing areas / buildings which are proposed to be retained.

5.24 The development area illustrated has been tested and defined through the options development process (refer to Options Report). The development area is responsive to existing physical / technical constraints, as well as the likely mitigation needed to facilitate development.

5.25 The amount of development expected to be delivered within the development area shown on the Framework Plan is set out in the tables over page.



Figure 5.4 Framework Plan
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Use	Location	Approximate Development Amount
Residential	Main development areas shown in the Framework Plan (masterplan parcels 2 & 3)	Approximately 1,255 – 1,470 new homes, assuming an average density range of 31 - 36 dwellings per hectare (dph) (net). (NB assumed density range is derived from masterplan character areas studies - refer to Chapter 6).
	Merseyside Dogs Home (masterplan parcel 1) currently occupies the northernmost parcel. Potential for future residential development subject to vacation of current uses and further site investigations.	Potential for approximately 25 dwellings if brought forward for development (subject to feasibility). Density as per character area guidance in Chapter 6.
	Existing Heyes Farmhouse along Lower Road and plot. Framework masterplan identifies building and plot for potential future residential development.	Currently one large farmhouse. Potential future capacity of site depending on scale and type of conversion / redevelopment.
	Hesketh land parcel to south of Lower Road (masterplan parcel 4). The developable area has increased to include the closed west bound lay-by (subject to a stopping up order). Parcel identified for potential mixed use development.	Total site area approximately 2.77ha (including existing highway layby) If brought forward only for residential development, capacity could extend to approx. 138 dwellings based on 50dph.
	Existing converted barns along Lower Road to be retained. Proposals for additional barn style development to north of existing barn / southwest of fishing pond.	The total site area including the pond is 2.35 hectares, the area covered by the new development is approximately 1 hectare and 11 new dwellings are proposed within.
Residential as part of a mixed use development	Parcel 4	Location potentially suitable for a mixed use development comprising small scale convenience retail, family pub and/or hotel, plus residential development

Table 5.1: Land use and amount

Use	Location	Approximate Development Amount
Vehicular and pedestrian access	<ul style="list-style-type: none"> • Greensbridge Lane: 2 no. new vehicular access points to serve residential development. Potential retention of existing access point to Merseyside Dogs Home to serve future residential development (subject to detailed assessment) • Greensbridge Lane: 1 no. pedestrian & cycle access point • Lower Road: 2 no. vehicular access points to serve residential development and new bus route. • Lower Road: 2 no. pedestrian & cycle access point and new pedestrian / cycle access through currently redundant railway archway. • Baileys Lane: 2 no. vehicular access points to serve residential development. • Baileys Lane: 1 no. pedestrian & cycle access point • Higher Road: 1 no. vehicular access point from reconfigured Higher Road carriageway to serve mixed use development. • Aldersgate Drive: 1 no. vehicular access point to serve residential development. 	<p>Use of developable area may be required to facilitate the improvements of existing junctions and highways as well as facilitating new means of access onto the highway network.</p> <p>There will be a land take for internal movement corridors as set out in the movement framework.</p> <p>This access would only be required to serve the residential element of the site. Commercial uses would need to be accessed via Higher Road.</p>
Green Infrastructure and Public Open Space	<p>A variety of Public Open Space typologies / spaces with amenity, mitigation and SuDS functions</p> <p>Retained, enhanced and expanded Finch Woods</p> <p>Flood Storage Area and ecological enhancements next to Ditton Brook</p> <p>Retained private fishing pond (assumed not publicly accessible)</p>	<p>Approximately 23 ha (excluding private fishing pond which covers 2.25ha)</p>

Table 5.1: Land use and amount (cont.)

Residential development



Figure 5.5 Residential development - links to wider objectives and policy framework

key guidance

Up to 1,500 new homes will be delivered at East of Halewood, providing a high-quality and distinctive new residential offer for this part of the City Region. Development will be delivered with a housing mix that aligns with Core Strategy policies, and be designed to create a series of coordinated and coherent character areas.

A sustainable neighbourhood

5.26 Development will attract new residents to the area, as well as connecting back to and supporting, the local Halewood community and its existing facilities.

5.27 Residential development will integrate with the surrounding natural environment and create a strong and inclusive part of Halewood. Development will integrate new homes with existing environmental features, movement routes and the countryside edge.

5.28 Development will include appropriate contributions for education and healthcare to support a sustainable community. These aspects are considered further in the Technical Appendix.

5.29 New development will protect the residential amenity of occupiers of existing dwellings located either within the site boundary or immediately adjacent (e.g. Baileys Lane).

5.30 Any new residential development will be designed in accordance with Secure by Design, Policy DQ2 and Designing Out Crime principles to reduce opportunities for anti-social behaviour and crime.

Housing mix

5.31 Development at East of Halewood will offer a range and mix of house types to support a sustainable community and which will attract a range of new people to live in the area and in accordance with the Local Plan Core Strategy, include a range and quality of housing which addresses current and future local and City Region needs.

5.32 A variety of house types, sizes and formats should be provided. A focus on providing larger family homes will be welcomed in order to help rebalance the wider Knowsley Borough housing market.

5.33 Local Plan Core Strategy Policy CS15 requires East of Halewood to deliver affordable housing in accordance with adopted policy requirements, unless it is clearly demonstrated that achieving the policy requirement would render the development unviable.

5.34 In accordance with this policy, 25% of new housing will be provided in affordable tenures. In accordance with the NPPF at least 10% of new housing will deliver affordable home ownership products. The remaining 15% will be split between affordable rented homes and shared ownership products, as per the split within the Council's Developer Contributions SPD.

5.35 An indicative split of affordable housing tenure and sizes is shown in Table 5.2 below.

5.36 In accordance with Local Plan policy, new affordable housing will be integrated with open market housing across the East of Halewood site to ensure it is not distinguishable from the market housing in terms of appearance and build quality.

5.37 New affordable housing will be delivered at the same time as market housing, to ensure its timely provision throughout the development period.

	% of affordable housing provision	Bedroom Size				
		1	2	3	4	5
Affordable Rent	45%	50%	50%	0%	0%	0%
Intermediate (inc. affordable home ownership)	55%	0%	40%	50%	10%	0%

Table 5.2: Indicative affordable housing provisions

Character and density

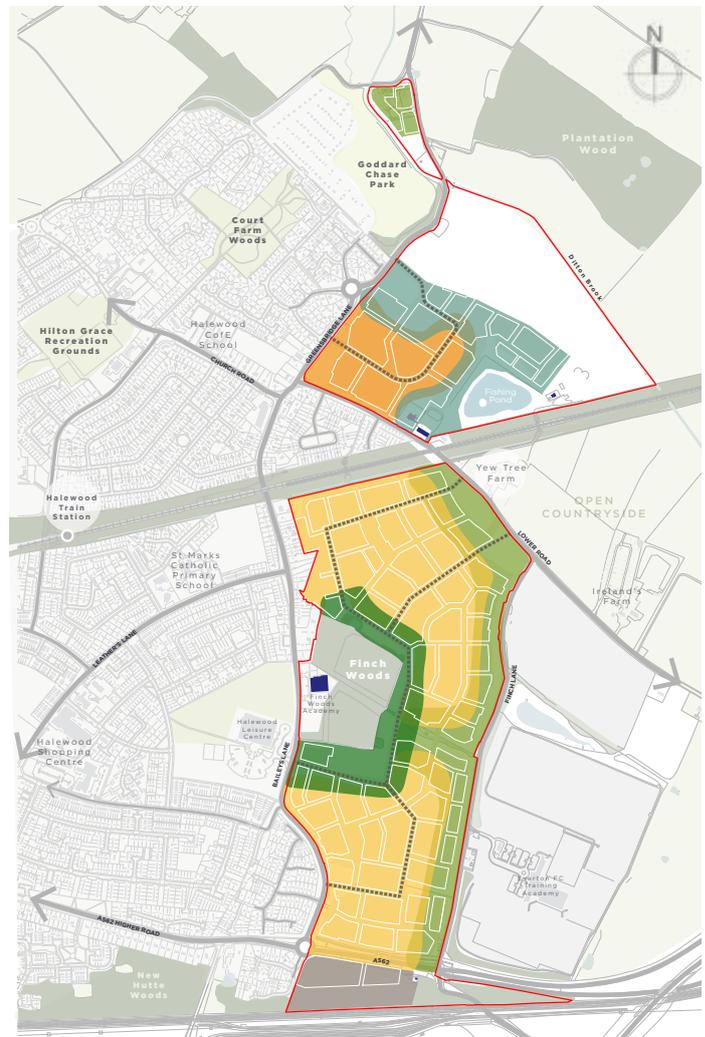
5.38 The scale and context of the site requires character areas to be established, in order to:

- Define distinctive sub-areas that help to guide movement through the wider neighbourhood.
- Create a distinctive sense of place on a human scale that engenders a sense of pride and ownership / responsibility.
- Ensure the new built environment is responsive to the established context, ensuring it integrates and respects both its urban and rural setting, and;
- Introduce built form character that enhances the local area and creates attractive and aspirational new homes.

5.39 The masterplan framework defines six character areas, summarised in the plan to the right (Figure 5.6). These areas are further defined in Chapter 6.

5.40 Development densities across the site will ensure the most efficient use of the land whilst representing an appropriate response to the existing context of Halewood. Establishing careful distribution of different densities will help manage environmental and visual impact, whilst simultaneously promoting sustainable movement and travel by non-car modes to existing facilities within Halewood.

The character areas will integrate different densities to help create a varied mix of residential forms and typologies, helping to ensure a choice of housing. In general terms development will introduce a gradual increase in density from north to south, and east to west.



Character Areas

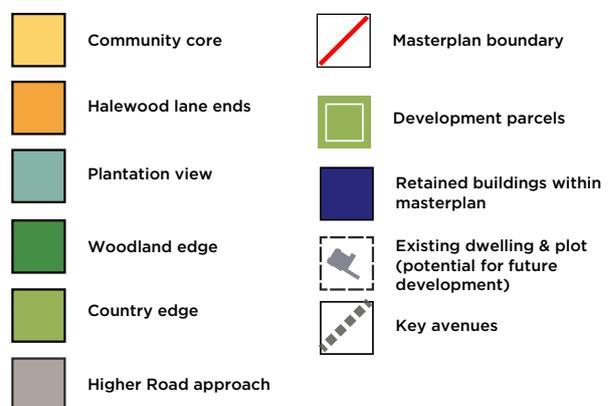


Figure 5.6 Character area summary

Not to scale.

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Higher Road approach to Halewood

5.41 The character area summary (Figure 5.6) shows that a higher density of development is proposed in the southernmost parcel along the West Coast Main Line. The currently closed lay-by is incorporated within this parcel to increase its developable area and it is understood that the land owner is actively seeking to acquire the currently unregistered land under their ownership (subject to a stopping up order).

5.42 Future development in this parcel will create a positive new frontage onto Higher Road and Aldersgate Drive, and play a significant role in defining the arrival experience to Halewood from the east. The development of the parcel will be completed by upgrades to the Higher Road corridor as identified on the Framework Plan.

5.43 There is the opportunity to deliver either a mixed-use development in this location or residential development.

5.44 If residential development should come forward, an upper density of 50 dwellings per hectare (net) is envisaged. This would deliver a more efficient use of the land and provide greater flexibility for future proposals to appropriately mitigate against any potential noise created from the West Coast Main Line and the operational activities associated with the Jaguar Land Rover facility (pending further detailed noise surveys).

5.45 If residential development is proposed within the Higher Road Approach character area, it is anticipated that a development setback is likely to be needed. A bund could be incorporated to mitigate against railway noise impact and create a quality internal and private residential amenity. Alternatively, the orientation and massing of new buildings or location of less sensitive land uses could also help to successfully mitigate against noise constraints.

5.46 Proposed noise mitigation will be outlined in a noise assessment to accompany a future planning application.

5.47 Should a mixed use development be proposed in this location, non-residential uses would likely be limited to small scale retail and/or commercial leisure (e.g. family public house / restaurant / hotel). Such uses might allow the development area to extend south towards the railway, for example to accommodate car parking.

5.48 The Council will carefully assess any proposed mixed use development to ensure this would not threaten the viability and vitality of existing retail and commercial uses within Halewood.

Green infrastructure

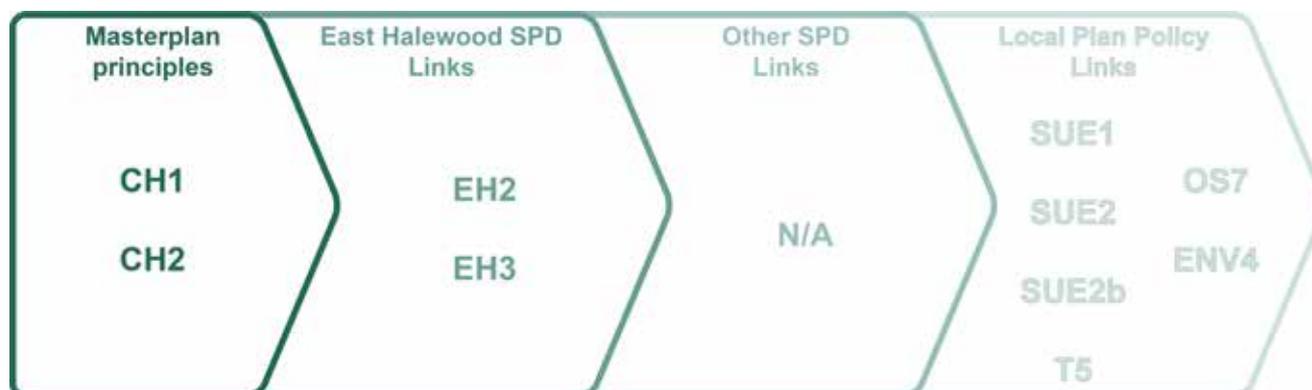


Figure 5.7 Green infrastructure - links to wider objectives and policy framework

key guidance

Development at East of Halewood will provide new Public Open Spaces in the form of parks and gardens, amenity greenspace, provision for young children, allotments and Outdoor Sports Provision in accordance with the Green Infrastructure and open space tiers plans.

An integrated landscape

5.49 Creating a comprehensive and connected Green Infrastructure is an integral part of the masterplan approach. The Green Infrastructure Framework Plan establishes a network of public open space typologies that will play a role in promoting good environment and visual quality, including preserving historic hedgerows and ecological habitats and contributing to a distinctive sense of place.

5.50 The Green Infrastructure Framework will complement and connect with the existing open space provision within Halewood, the surrounding open countryside and with Ditton Brook.

5.51 The Green Infrastructure Framework will combine with the Access and Movement Framework to deliver strong connections to surrounding areas of public open space destinations including Goddard Chase Park and Court Farm Woods.

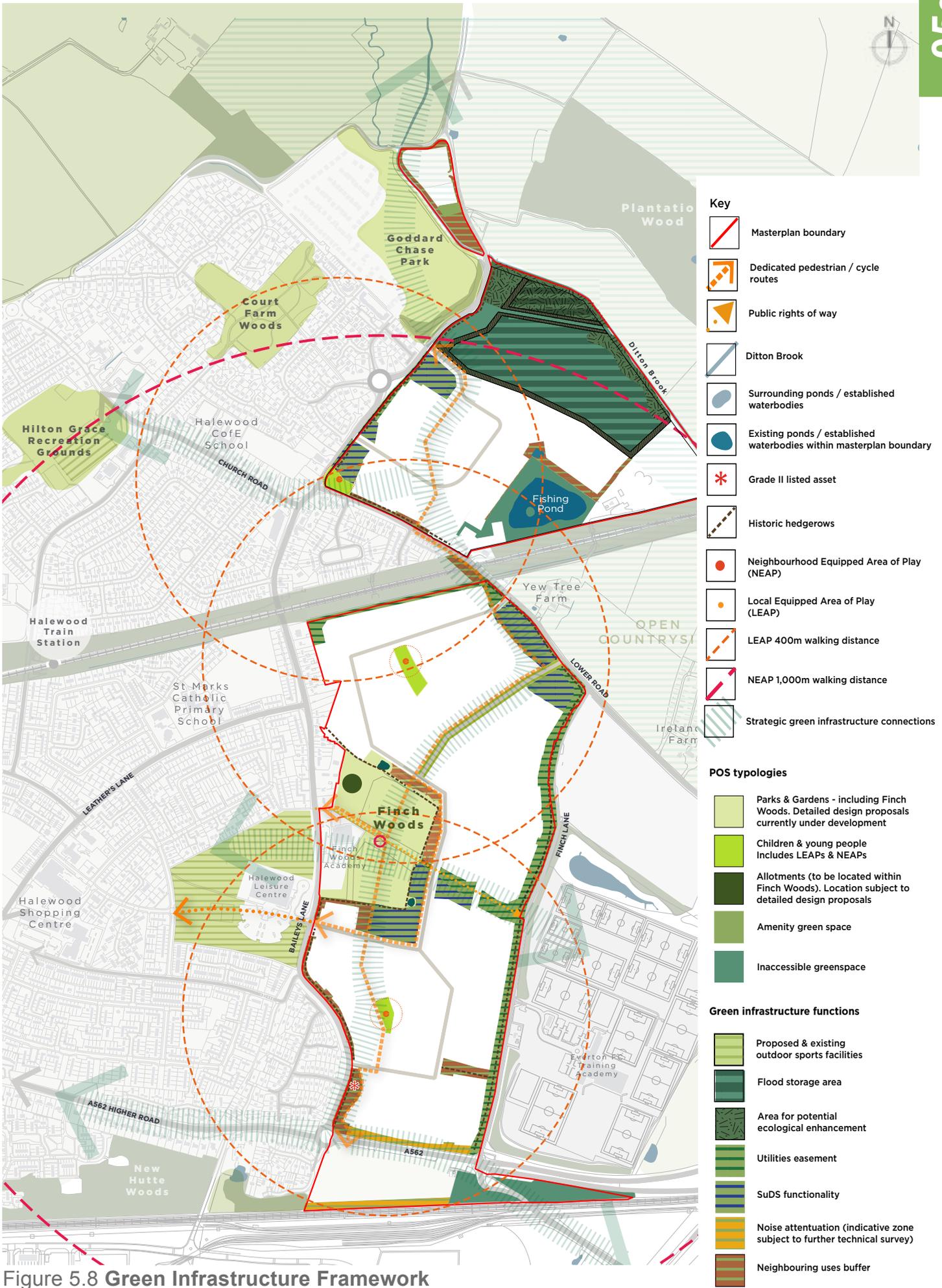


Figure 5.8 Green Infrastructure Framework
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Finch Woods as a community asset

5.52 Finch Woods sits at the heart of the Green Infrastructure Framework. By occupying a central location, there is an opportunity to reinforce this existing open space as a high quality, accessible park and garden space for both new and existing residents.

5.53 Finch Woods will be improved - enhancing existing areas of woodland, whilst also sensitively introducing a variety of play, recreation and outdoor community uses and improving pedestrian and cycling accessibility across the woods.

5.54 Areas of open space can be created along the eastern, northern and southern fringes of Finch Woods, providing positive separation between the woodland and proposed residential development areas and helping to provide;

- A visual setback allowing the visual appeal and placemaking contribution of the enhanced woodland to be maximised;
- An attractive view for new homes to be orientated towards the woodlands, creating passive surveillance across it and help reduce potential for anti-social behaviour, and;
- The introduction of interesting and attractive water bodies and SuDS features, including wetland ponds and swales as well as the dedicated pedestrian / cycle route.

Historic hedgerows

5.55 Historic hedgerows are to be retained and incorporated as part of the green infrastructure structure across the site. As a prominent existing feature, they add significantly to the character and local distinctiveness of the East of Halewood site.

5.56 The location of hedges along the edges of the site also mean they play a role in helping to provide a visual foil between new development and the existing urban context, helping to integrate old and new as well as being an attractive, coordinating townscape feature.

5.57 Some loss of existing hedgerows will be required to facilitate new access into the development and in key areas, to allow for visual connectivity to be achieved. The extent of hedge removal will be established through detailed access design at the planning application stage.

5.58 Where loss of hedgerows is compensatory new tree and hedgerow planting will be provided within the development areas.

Green corridor connections

5.59 Green corridors will enhance connectivity across the site, whilst providing ecological pathways and habitats. Corridors will also play a role in mitigating environmental and utility constraints as well as enhancing the spatial composition of new development, for example framing views and facilitating variation in scale and height of development.

5.60 The masterplan framework identifies potential for a number of green corridors along the edges of the SUE site, including;

- A continuous north-south linear green space along Finch Lane, providing a setback for development from the historic hedgerows and existing drainage ditches;
- A green corridor connecting Finch Woods and Finch Lane, aligned to the existing Public Right of Way (PRoW) and drainage ditch. This will integrate upgrades to the existing PRoW route and existing ditch (potential PRoW upgrades are discussed in Chapter 6);
- A green corridor aligning with Finch Woods Park Way bus route and dedicated cycle route between Finch Woods and Lower Road, connecting the strategic green space with the array of SuDS features;
- Linear spaces along Baileys Lane, adjacent to the listed gravestone, Lower Road and Greensbridge Lane, providing a setback for development from the historic hedgerows;
- Open space incorporating the existing private fishing pond and United Utilities land parcel, allowing development to be set back and overlook these areas; and
- A potential buffer space to the West Coast Main Line railway for residential development to be set back, the full extent of which to be determined through more detailed noise investigations.

5.61 These green corridors could take a variety of forms and scales, integrating different landscape features and characters. They will link larger scale, strategic open spaces to smaller scale, local spaces as part of a coherent green infrastructure network.

Sustainable drainage systems (SuDS)

5.62 The masterplan framework proposes retention of existing water bodies and sets the basis for an integrated SuDS network. Future development will create a SuDS network that is integrated within the landscape setting, adds both visual and ecological value and contributes to the richness of development character and sense of place. The SUE presents a significant opportunity for exemplar sustainable drainage and future proposals should look to incorporate a variety of SuDS features wherever possible as part of their greenspace strategy.

5.63 The masterplan framework identifies seven potential attenuation basins across the site. These are proposed with consideration for land levels, potential discharge locations, land ownership constraints and the potential to enable simultaneous provision for multiple sites.

5.64 The basins shown are located in prominent locations where they can become attractive and interesting features within the wider green infrastructure network.

5.65 It is anticipated that swales could also be integrated into the development around public open spaces and where streets front open spaces and corridors. Such swales have potential to create a series of attractive features.

5.66 Further guidance on the location and type of SuDS is set out in Chapter 6.

Ecology

5.67 The network of green spaces, green corridors and SuDS features provides an opportunity for ecological mitigation and enhancement, as well as increasing biodiversity across the site as part of an integrated approach.

5.68 Specific ecological measures will be an integral part of the green infrastructure network and include;

- Creation of a significant area of ecological enhancement along the Ditton Brook Corridor, in accordance with the principles of the Nature Improvement Area. Further detailed work is required in partnership with Merseyside Environmental Advisory Service (MEAS) and the Environment Agency (EA) to determine appropriate mitigation and enhancement interventions;
- Mitigation of impact upon the identified Local Wildlife Sites including Netherley Brook and Ditton Brook Corridor and those identified to the north of the site;
- Creation of a buffer around the existing ponds to the south and north of Finch Woods, and to the north of the existing fishing pond. The extents of the buffer space will be determined through more detailed ecological assessments;
- Management to contain the spread of invasive species; which may mean the necessary eradication of some species, for example Japanese Knotweed;
- Retention and enhancement of as much of the existing hedgerows as feasible, including reinforcement with native wildflower planting of seed-mix of local provenance for foraging;
- Maximising habitat connectivity through the arrangement of contiguous rear gardens;
- Incorporation of habitat creation within residential developments, for example through tree planting and new green space development within residential areas;
- Provision of bat boxes, bird boxes and any other habitat creation as identified during the planning process and;
- Minimisation of the impact of the development process on retained habitats and watercourses within the development and wider area and;
- Ensure that future attenuation basins located in close proximity to existing ponds are hydraulically separated to ensure that existing ponds are retained in their current form.



Figure 5.9 View north along Ditton Brook

Open space requirements

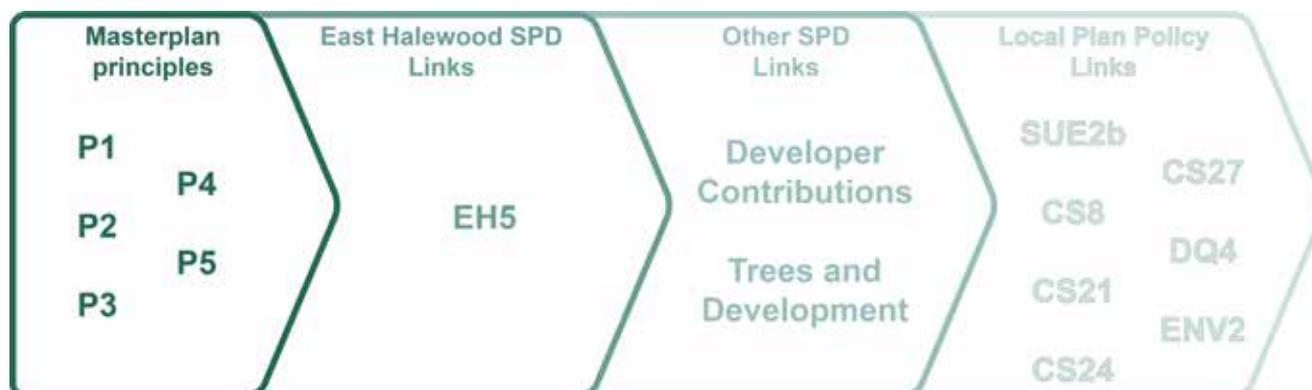


Figure 5.10 Open space requirements - links to wider objectives and policy framework

key guidance

Development will accord with Local Plan Core Strategy Policy CS21 by contributing to Public Open Spaces (in the form of parks and gardens, amenity greenspace, provision for young children and allotments) and Outdoor Sports Provision (in the form of playing fields and equipped outdoor courts).

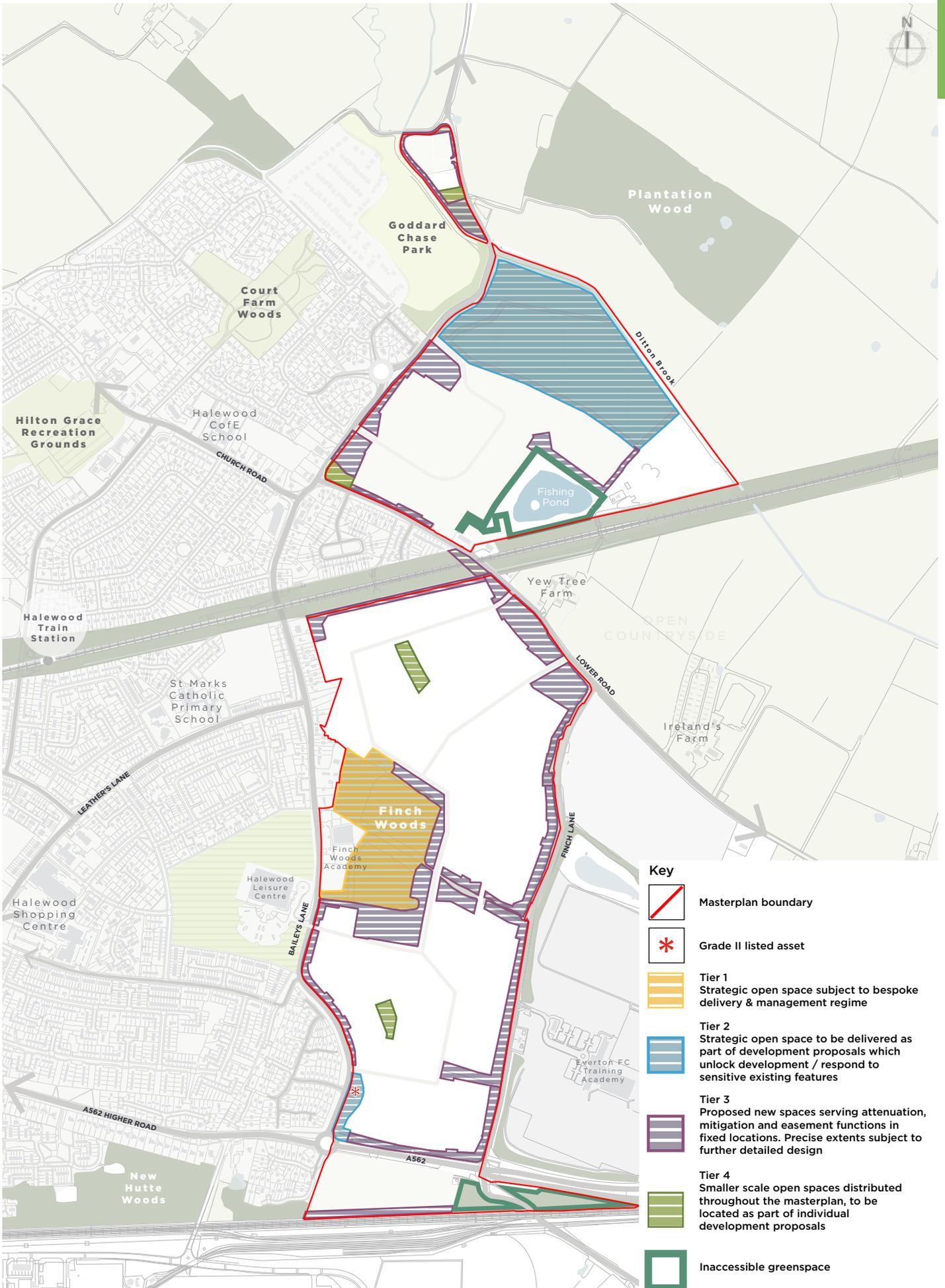
Open space 'tiers'

5.69 Delivery of public open space will be guided by the 'tiers' of open space identified in Figure 5.11. These tiers are defined by (i) relative strategic importance, (ii) relative flexibility of location and design, and (iii) responsibility for delivery and maintenance;

5.70 **Tier 1** - Strategic open space located outside the development areas, but of strategic place-making significance. These to be subject to a bespoke delivery and management regime.

5.71 **Tier 2** - Strategic open space located outside of the development areas, but to be incorporated into and delivered as part of development proposals (e.g. strategic flood storage).

5.72 **Tier 3** – Strategic open spaces serving defined mitigation, easement and amenity functions in fixed locations, but with precise extents / detailed design to be determined through collaboration between the Council, developers and other relevant stakeholders as part of future planning applications.



Key

-  Masterplan boundary
-  Grade II listed asset
-  Tier 1
Strategic open space subject to bespoke delivery & management regime
-  Tier 2
Strategic open space to be delivered as part of development proposals which unlock development / respond to sensitive existing features
-  Tier 3
Proposed new spaces serving attenuation, mitigation and easement functions in fixed locations. Precise extents subject to further detailed design
-  Tier 4
Smaller scale open spaces distributed throughout the masterplan, to be located as part of individual development proposals
-  Inaccessible greenspace

Figure 5.11 Open space tiers

Not to scale. © Crown Copyright Knowsley MBC 100017655. 2020

Opportunities and responsibilities within each tier

5.73 **Tier 4** - Smaller scale open spaces distributed throughout the residential development area, to be located, designed and delivered as part of individual planning applications. These must be well integrated within housing layouts, and be safe and overlooked.

5.74 Planning applications will demonstrate how the development proposed will physically incorporate the open spaces shown as tiers 2, 3 and 4 in the Open Space Tiers Plan (Figure 5.11) as an integral part of the housing layout. Planning applications will detail proposed arrangements for long-term maintenance of public open space.

5.75 All proposed open spaces must be accompanied by a robust and sustainable management regime. The Council will support practical solutions that avoid the risk of creating an unsustainable maintenance burden. The Council will encourage and support a co-ordinated approach to management and maintenance of open space across the SUE, especially to ensure consistency in maintenance regimes of adjacent spaces.

5.76 Further consideration of maintenance and management of public open space is included in the Technical Appendices.

Tier 1

5.77 Finch Woods is located outside of the proposed development areas but is a key opportunity to contribute to provision of 'park and garden' open space typology. This will also include provision for children and young people in the form of a NEAP, and could also become a location for community allotments (benefiting new and existing communities alike). The Council will prepare a concept design proposal for Finch Woods, and will expect developers within the SUE to contribute to its delivery and long term maintenance (please see Chapter 6 for concept design proposals).

Tier 2

5.78 These strategic open spaces will help to unlock development potential and enable a response to / mitigation of impacts on existing features. Tier 2 spaces include the area identified for flood storage along Ditton Brook and a space around the Grade II Listed asset. A preferred approach to the design of such spaces is included in Chapter 6, however the Council will welcome proposals from developers to take this forward to detail. Developers will take responsibility for establishing long-term management and maintenance arrangements of all Tier 2 spaces.

Tier 3

5.79 Tier 3 spaces will serve attenuation, mitigation and easement functions, as well as enhancing residential amenity and development character. These spaces will provide an important point of integration between strategic landscapes and new development areas. Developers will take responsibility for establishing long-term management and maintenance arrangements of all Tier 3 spaces.

Tier 4

5.80 Intimate, smaller scale spaces providing visual and residential amenity and Locally Equipped Areas of Play - spaces dedicated to children and young people. Developers will take responsibility for establishing long-term management and maintenance arrangements of all Tier 4 spaces.

Public open space function (Local Plan Categories)	Locations	Amount (Ha)
Park and Garden	Finch Woods.	Circa 4.16 ha
Provision for children and young people	Neighbourhood Equipped Area of Play (NEAP) located within Finch Woods subject to detailed design proposals. Local Equipped Area of Play (LEAP) to the south of Finch Woods. LEAP to the north of Finch Woods. LEAP to the north of Manchester – Liverpool Railway line, on the corner of Greensbridge Lane and Lower Road. <i>Exact locations to be confirmed through the planning application stage.</i>	1 no. NEAP 3 no. LEAPs
Allotments	Potential to be integrated within Finch Woods subject to detailed design proposals (or alternatively delivered through investment in existing allotments in Halewood).	Circa 0.3 ha (based upon 1,500 residential units across the site)
Amenity Greenspace – mitigation	Distributed across the masterplan. Includes buffer spaces for neighbouring uses, spaces with SuDS function, utilities easements, noise / vibration attenuation.	Circa 9.61 ha
Amenity Greenspace – flood storage	Along Ditton Brook corridor and Nature Improvement Area.	Circa 8.46 ha
Amenity Greenspace – relief space	Indicative spaces providing relief space within the residential areas.	TBC at planning application stage
Inaccessible green space	Existing fishing pond north of Lower Road in private ownership.	Circa 1.35 ha
Outdoor sports	Located within Halewood Leisure Centre beyond the masterplan boundary – to be delivered through developer contributions.	N/A

Table 5.3: **Open space amount**

Open space amount

5.81 Open spaces will perform a wide range of functions. The Green Infrastructure Framework plan (Figure 5.8) and Open Space Tiers plan (Figure 5.11) set the broad location and function of open space, but detailed provision in terms of extent and function will be determined through the planning application process.

5.82 To guide future discussions, the amount of open space that is expected to be delivered across the SUE is summarised in Table 5.3 below, by function.

5.83 In addition to this provision it is expected that housing layout will integrate high quality landscape features, including incidental spaces that enhance the setting of new homes and provide visual foil in the townscape. This will also help create coherent street design and street hierarchy (see later chapters), and enhance dedicated pedestrian and cycle routes. Avenue street spaces will incorporate more formal landscape elements such as avenue tree planting and verges. Neighbourhood Streets can incorporate informal planting.

5.84 Further guidance is provided in Chapter 6.

Design and materials

5.85 All open spaces at East of Halewood will be expected to demonstrate a commitment to delivering the highest possible quality of materials and equipment. Open spaces should include hard and soft landscapes of different formats and geometries that are responsive to and enhance their immediate context and are consistent with the built form character areas.

5.86 The accompanying design guidance in Chapter 6 sets a framework for the design of landscape and play spaces. This does not constitute a prescriptive design code or detailed specification for open space or materials palette, but provides guidance that developers will be expected to follow and build on or provide alternative approaches which achieve the same placemaking objectives. The detailed design and specification of open spaces will be discussed and agreed at pre-application stage.

Contribution to mitigation and infrastructure provision

5.87 Public open space across the SUE will not only have a placemaking and amenity role, but will facilitate practical response too and mitigation of constraints, and facilitate infrastructure delivery.

5.88 A summary of these practical contributions is set out in Table 5.4 overleaf.

Contribution	Description
Buffer to key site features	Areas of space designed to create separation from proposed development and existing features - in particular Finch Woods and historic hedgerows.
SuDS functionality	Seven attenuation basins as well as opportunity to incorporate a variety of SuDS features across the site.
Easements and set backs (refer to later chapters for further details on utilities easements)	<ul style="list-style-type: none"> • Buffer space from Greensbridge Lane providing setback historic hedgerows and utilities easements. • 30m setback from Network Rail ownership for any proposed attenuation basins • Minimum of 8m setback from top of bank along Ditton Brook to prevent public access to ecological features along the river bank. • Small buffer from Lower Road, providing setback to watermains utilities and historic hedgerows. • Set back from Manchester – Liverpool railway line embankment and combined fould sewer utilities. • Buffer space along Finch Lane to provide easement to Combined Rising Mains and underground 132Kv cable. • Set back from existing drainage ditch along PRow.
Noise / vibration attenuation	The setback distance and measures required to mitigate noise and vibration arising from West Coast Main Line and adjacent car plant will be determined in relation to the type and form of development and technical evidence submitted at the planning application stage. This mitigation could include a setback of usable public open space and/or bunds. Should a mixed-use component come forward on part of the parcel, or future noise assessments indicate lower than anticipated noise levels, there may be opportunities to reduce the area needed for noise mitigation, either through built form and use or through the provision of customer/visitor car parking.
Flood Storage Area (FSA)	<p>Located along Ditton Brook corridor and within the Nature Improvement Area. The FSA will require a lowering of existing land levels to accommodate future flooding from the Ditton Brook, including the 0.1% and 1% AEP events plus 70% for climate change. The FSA will be lowered to 6.0m AOD, with adjacent areas of proposed development raised to 9.0m AOD.</p> <p>There are a number of existing services within the area proposed for FSA, including a 36" Steel Pipe Rising Water Mains. The current depth of the pipe needs to be confirmed, however if it is above the proposed 6.0m AOD FSA lowering, then bunding may be required to preserve the integrity of the pipeline. A United Utilities inspection chamber sits to the east of Greensbridge Lane. These utilities should be accounted for as detailed design and maintenance proposals are proposed.</p>
Setting of Grade II Listed gravestone	Development is required to be setback from the current location and siting of the Grade II Listed asset (Blackie the Warhorse gravestone). The pasture land character of the setting of the gravestone should be sustained and enhanced, the development should be set back accordingly. Please refer to Chapter 6 for guidance on the preferred development response to the Grade II Listed gravestone and its setting.
Ecological enhancement	An area along the southern banks of the Ditton Brook has been identified for ecological enhancement, in line with the Netherley and Ditton Brook Nature Improvement Area.

Table 5.4: Open space roles in mitigating against constraints & facilitating infrastructure

Access and movement

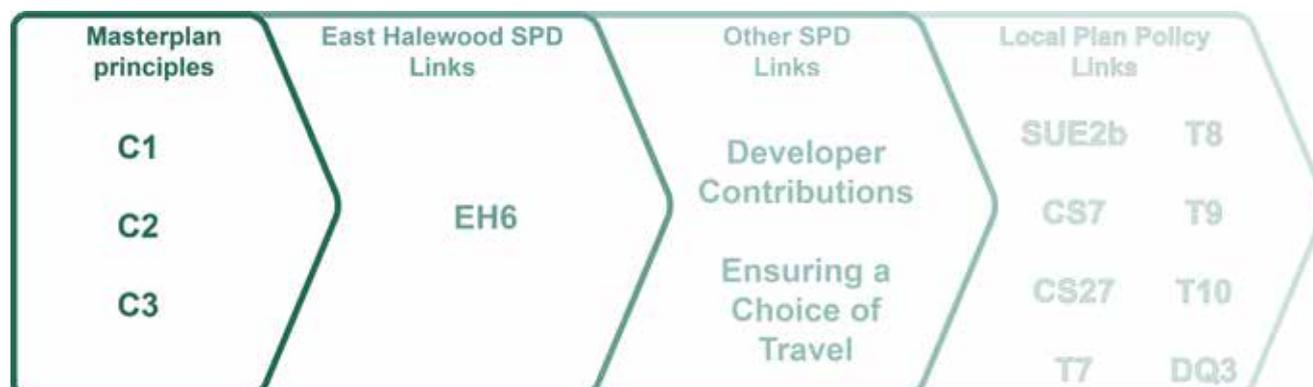


Figure 5.12 Access and movement - links to wider objectives and policy framework

key guidance

Future development at East of Halewood will accord with the key spatial movement principles set within the Access and Movement Framework plan, the narrative outlined in this chapter and the design guide within Chapter 6 of this document. Proposals will also comply with the relevant policies identified in Figure 5.12 above.

Connected and inclusive framework

5.89 New development will be structured to maximise connectivity to Halewood, whilst providing a permeable and legible network of routes within the site. The Access and Movement Framework plan shows a comprehensive and connected network that is clear and logical. This would maximise permeability and legibility for network users, and form the basis of safe and inclusive street spaces.

5.90 The Access and Movement Framework plan is based on an approach to street hierarchy and design that will promote pedestrians and cyclist in the user hierarchy. It also seeks to enable and encourage wider use of sustainable transport modes. This includes provision of a dedicated pedestrian and cycle route running north-south through the site, and accommodation of a bus route.

5.91 The Access and Movement Framework represents a refinement of the principles explored through the options testing and stakeholder engagement process. It is underpinned by key guidance documents such as Manual for Streets (DfT and DCLG 2007) and Manual for Streets 2 (CIHT, 2010).

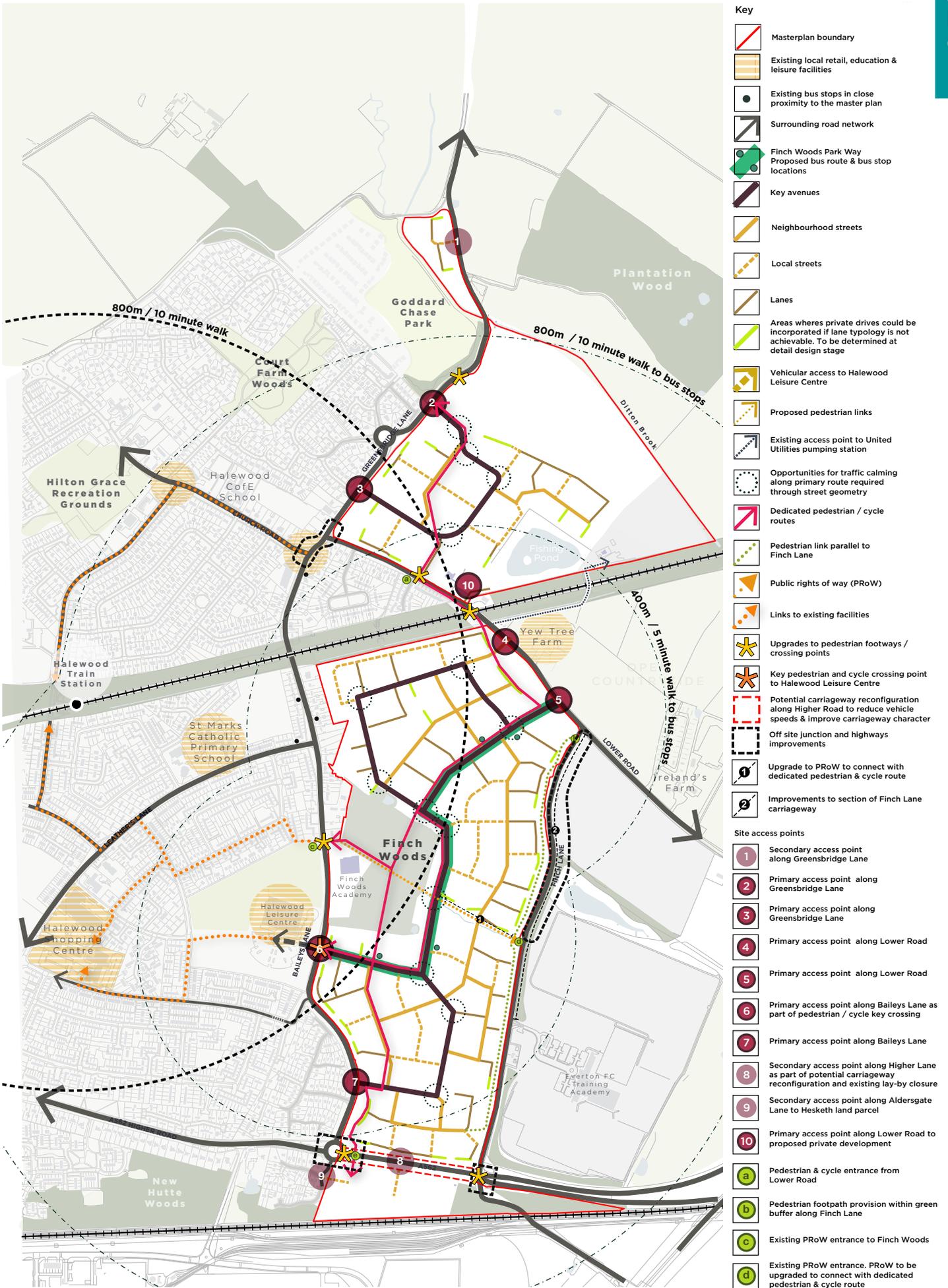


Figure 5.13 Access and Movement Framework plan
 Not to scale. © Crown Copyright Knowsley MBC 100017655. 2020

Manual for Streets principles

5.92 Manual for Streets has established a clear series of principles which can influence creation of an attractive and inclusive street network. This includes the need for streets to be designed as;

1. Well-loved public places that define the public realm and create a positive pedestrian-friendly character.
2. Part of a clear and permeable network – a range of connection options that are easy to navigate and overlooked.
3. Animated and vibrant – adjacent land uses, building design and landscape design providing varied and active frontage.
4. Safe, secure and comfortable – well lit, well maintained and inclusive providing for the mobility impaired.
5. Practical and easy to maintain – clear boundaries, a robust and consistent materials palette and underground utility runs designed to minimise disruption at times of repair and maintenance.

5.93 These universal principles underpin the Access and Movement Framework and will continue to be used to influence and assess proposed street design going forward to detailed stage.

Linking communities

Bus connections

5.94 A key aspiration is to establish a movement framework which encourages access to and the use of sustainable modes of transport. The masterplan framework includes potential to accommodate a bus service running through the southern part of East of Halewood, where it can provide immediate links between future new communities and;

- Established social infrastructure and amenities - including Halewood Shopping Centre;
- Halewood and Hunts Cross train stations;
- Wider employment, healthcare and recreation opportunities.

5.95 Buses can be accommodated within the Finch Woods Park Way street type shown in the framework plan. Alignment would allow connection between Lower Road to Baileys Lane, through the core of the site and along the eastern edge of Finch Woods. The masterplan framework promotes the provision of a pair of two new bus stops, located close to Finch Woods centrally within the site. This would maximise accessibility for future residents.

5.96 A bus service could be delivered through a diversion of and/or increased frequency of existing services, or through provision of additional services. Further bus accessibility is available from the Halewood Shopping Centre bus stops including; Huyton, Allerton and Woolton are available. A future bus service through the site could provide wider sustainable access to these services. This will be determined through discussion with Merseytravel and operators, including the necessity of a developer-funded subsidy to support operation of a bus service in advance of commercial viability. It is expected that

applicants will engage with Merseytravel and operators will discuss service options, routing, frequency and funding.

5.97 Bus stops will need to be provided in accordance with Merseytravel's design standards. Further details are set out in Chapter 6.

5.98 Opportunities for pedestrians to access existing bus stops also will be facilitated by the proposed new access points along Baileys Lane (north and south of Finch Woods) and Lower Road. Walking and cycling networks across the site will provide direct and legible access to existing bus stops, connecting into the existing PRow through Finch Woods (as well as through a new public open space at the corner of Greensbridge Lane and Lower Road).

A dedicated pedestrian and cycle link

5.99 Pedestrian and cycle connectivity is promoted through the provision of a high-quality, safe and convenient pedestrian and cycle link. This dedicated link provides access between the northern and southern areas of the SUE (including the southernmost Hesketh land parcel), crossing underneath the existing railway viaduct and over Higher Road.

5.100 This link also offers the opportunity to provide sustainable connectivity into Halewood, including through the Leisure Centre towards the shopping centre. The link will also open up access by tying into the existing road network and existing footpaths and cycleways.

5.101 The proposed route also connects a number of key spaces and places within and outside of the site, including; the Grade II listed asset, a high-quality Neighbourhood Equipped Area of Play in Finch Woods, the railway viaducts along

Lower Road, the proposed ecological landscape within the flood storage basin, and Goddard Chase Park. The route will also pass local play areas and SuDS features within the site.

Junction and crossing and highway improvements

5.102 As well as establishing strong and sustainable links with Halewood, the masterplan also identifies upgrades to existing routes and junctions to ensure that the impact of traffic generated by the new development is mitigated, and that key routes to and from the site are safe, convenient and integrated.

Junction and highway improvements

5.103 To support the identification of necessary works, Knowsley Council commissioned Mott MacDonald to undertake a traffic modelling exercise to inform the process of identifying the junction and highway improvements required as a result of the development of the East of Halewood site. Using the Liverpool City Region Transport Model, the study identified the impact on the highway network immediately surrounding the East of Halewood by 2035, accounting for an appropriate anticipated growth scenario, as well as the impact of the East of Halewood development.

5.104 The Masterplan Framework diagram as well as the Movement Framework at Figure 5.12 identifies those junctions and routes immediately adjacent to the site that will require improvement works to facilitate the development of the East of Halewood site. These are:

- Junction improvements at Greensbridge Road / Lower Road and Church Road / Baileys Lane

- Junction improvements at Baileys Lane / Finch Lane
- Junction improvements Higher Road / Finch Lane
- Convert section of Finch Lane between Finch Farm and Lower Road to one way northbound to address narrow route that is not wide enough to accommodate two-way traffic.
- Upgrades to Higher Road / Baileys Lane junction to facilitate the proposed pedestrian and cycle connection between the Grade II Listed Building and onward connections. Potential to reconsider the location, scale and design of the existing crossing point as part of Higher Road central reservation reconfiguration; and

Pedestrian and cycling connectivity improvements

5.105 In addition to the above, the following works are proposed to facilitate safe pedestrian and cycling movements to and from the East of Halewood site:

- Upgrades to Greensbridge Lane to facilitate the proposed pedestrian and cycle connection between Goddard Chase and the proposed ecological and landscape meadow;
- A new crossing on Lower Road to ensure connectivity of the pedestrian and cycling route between the development off Lower Road within the northern and southern development parcels;
- Opening up of the currently redundant railway viaduct along Lower Road, allowing the pedestrian and cycle route to run parallel to the existing highway, creating a safer and better quality pedestrian connection through the viaduct archways;
- Upgrades at the point where Baileys Lane meets the existing PRow, facilitating pedestrian and cycling access east across Baileys Lane;
- Provision of a key pedestrian and cycle crossing facility incorporated with the current Halewood Leisure Centre access and proposed site access point to ensure safe and convenient access and adjacent upgrades to the road alignment and forward visibility at Baileys Lane between the Halewood Leisure Centre access and Higher Road;

- Upgrades at Finch Lane / Higher Road to improve the safety and function of the junction for motorists, cyclists and pedestrians. Future proposals will respect the maintenance of Everton Football Club's requirement to maintain access to Finch Farm.

Upgrades to Higher Road

5.106 The masterplan framework recognises that Higher Road is a prominent gateway into Halewood. This definition and quality of this gateway will be enhanced by the proposed development in terms of scale, massing and appearance of new homes that front it. The proposed reconfiguration of the existing carriageway and Finch Lane and Baileys Lane junctions will also enhance environmental quality.

5.107 The masterplan framework assumes that the development area could extend north to include the currently redundant lay-by. This would create the opportunity to present new buildings much closer to Higher Road. The character and massing of residential development on the northern side of the carriageway (on the former RSPCA site) would also enhance Higher Road by establishing a frontage and sense of enclosure which is currently absent.

5.108 Reconfiguration of Higher Road by the widening of the existing central reservation to accommodate a landscaped space and planting will help to create a positive and noticeable

arrival threshold. This also provides further opportunity for improved provision of cycleways and footpaths to either side of the carriageway, establishing Higher Road as a sustainable link between development site and employers including Jaguar Land Rover, and others in Speke and Halebank/Ditton.

Circulation within the development

A connected and coordinated street network

5.109 New development must deliver a coherent street network and hierarchy across all parcels. Given the existing number of land ownerships and interests, a key requirement will be for all developments to ensure uninterrupted vehicular and non-vehicular linkages across ownership boundaries.

5.110 The masterplan framework shows that Avenues and Neighbourhood Streets will link across different land ownerships. This alignment and geometry arises from a holistic, comprehensive approach where design and coordination of the street network is not compromised by ownership boundaries.

5.111 The successful delivery of the dedicated pedestrian and cycle route will also require coordination across different land ownerships as well as positive integration within open spaces including Finch Woods and the ecological/meadow landscape to the north.

Vehicular Access

5.112 The masterplan framework comprises four individual parcels of land, separated by existing road and rail infrastructure; however, they are connected by the same wider road infrastructure.

5.113 The existing Merseyside Dogs Home is currently accessed from Greensbridge Lane.

The masterplan proposes the continued use of this existing access point, subject to further capacity testing and design.

5.114 Development on the land south of Ditton Brook will take two primary accesses from Greensbridge Lane. Both access points are linked by an Avenue street, which serves the centre of this large northern development parcel and from which a network of lower order streets will follow.

5.115 Upgrades to the existing access point serving the proposed development at land ownership parcel D (proposed 1ha of land developed for residential development) will be required from Lower Road. This will be a minor access point serving only dwellings within parcel D, and their existing neighbours.

5.116 The largest southern development parcel has vehicle access points along Lower Road and Baileys Lane respectively. The new junctions are proposed as follows:

- Finch Woods Park Way (bus route) and Avenue street access connecting onto Lower Road, south east of Yew Tree Farm;
- Avenue Street access connecting onto Lower Road, north west of Yew Tree Farm;
- Finch Woods Park Way (bus route) and Avenue street access onto Baileys Lane in the form of a signalised cross-roads junction, opposite and incorporating the existing access point into Halewood Leisure Centre. This will also form a key pedestrian and cycling access to the site;
- Further Avenue street access along Baileys Lane, sitting north of the Grade II listed asset.

5.117 The smaller southernmost parcel is to be accessed primarily from its northern boundary on Higher Road and secondly from its western boundary along Aldersgate Drive, depending upon the type of future uses that are presented through the planning application process.

Neighbourhood Street access from Aldersgate Drive will only serve the residential element of any future proposal. The primary access from Higher Road will serve both the residential and mixed use elements of any future proposal (the nature of which to be determined through pre-application discussions). The access along Higher Road is facilitated through the reconfiguration of the Higher Road carriageway and its junctions with Baileys Lane and Finch Lane, together with the closure and use of the redundant lay-by.

5.118 All site access points should be designed to maximise connectivity to the existing network, but with appropriate dispersal of residential vehicular traffic onto the local highway network.

5.119 The junction format and design onto Baileys Lane opposite the Leisure Centre is proposed to be a signalised cross roads, providing safe and convenient pedestrian and cycle movement between the Leisure Centre and East of Halewood. The remaining junctions which provide access to the site are likely to be priority junctions. The detail design of each of junction will be agreed through the submission of planning applications.

Residential street hierarchy

5.120 Good street design is crucial in creating a simple, legible and permeable network of routes, which not only connect new residents to outdoor spaces, but successfully promotes sustainable and convenient access to Halewood and its local amenities and services.

5.121 The structure of the masterplan framework is defined by a balanced series of street typologies, which work as part of a legible and connected network to connect green spaces and built form.

5.122 Specific elements in the street space, including tree planting, geometric alignments, car parking provision, boundary treatments and a coordinated materials palette will further underpin the character and local distinctiveness across the site.

5.123 The street typologies used within the masterplan include;

- Finch Woods Park Way (Bus Route)
- Key avenues
- Neighbourhood Streets
- Local streets
- Lanes

5.124 The Access and Movement Framework plan (Figure 5.13) shows how a simple and legible street hierarchy could be applied. This is supported by a summary description in Table 5.5 opposite and further design specification provided in Chapter 6.

Typology	Characteristic
Avenue Streets	<p>Avenues will play a unifying role across the site and act as the positive first impression upon arrival to the development. They will accommodate buses (in part along Finch Woods Park Way), cars, cyclists and pedestrians. In some instances, they will be designed to accommodate the dedicated pedestrian and cycle route, with cycle and pedestrian footways widening to 3m accordingly. They will distribute the highest volumes of traffic through the development, feeding through to Neighbourhood and Local streets.</p> <p>The geometry of key Avenues is designed to naturally calm traffic speeds, through angled bends reacting to shifts in building lines and spaces and avoiding sweeping geometries. Avenues will be fronted on both sides (apart from where they pass along areas of public open space) to create a sense of activity which also naturally lowers vehicle speeds. Formal avenue tree planting will also help to calm traffic speeds.</p> <p>In the large southern parcel, the Avenue is a key linkage connecting the northern area of this development parcel with Finch Woods and more directly to Baileys Lane and Halewood Leisure Centre. The design of this street will need to strike the right balance between providing route choice for residents, positively integrating with Finch Woods and discouraging rat running through the site from Lower Road to Baileys Lane.</p>
Neighbourhood Streets	<p>Neighbourhood Streets connect from Avenues and give access directly to development parcels as well as Local Streets and Lanes.</p> <p>In combination with Avenues, Neighbourhood Streets form connecting loops within the site, creating a legible and connected network. Neighbourhood streets will be suitable for cars, cyclists and pedestrians and are characterised by tree planting along the carriageway and should be fronted on both sides.</p>
Local Street	<p>Local Streets are characterised by a high-quality streetscape and a more enclosed street section. The street will be fronted along both sides, however building lines along these streets can become more informal. The street carriageway will consist of on-street parking bays, tree planting and a consistent materiality throughout.</p>
Lanes	<p>Residential Lanes are similarly characterised to Local Streets, by a high-quality streetscape however, the street scene will either include frontage to both sides of the carriageway or frontage onto public open space. The building lines along these streets can become more organic with variable garden depths. The street carriageway will consist of on-street parking bays, shrub planting and a consistent materiality throughout.</p>
Shared Private Drives	<p>It is acknowledged that shared private drives will be required in some locations to facilitate direct drive access and frontage orientated over public open spaces. The use of shared private drives should be limited to 3 dwellings and/or 25 metres length unless in exceptional circumstances and considered to ensure they are connected without creating dead-ends. They are characterised by a narrow carriageway which accommodates pedestrians, cyclists and vehicles. Building lines can vary along these routes, becoming more informal, creating interest and character to these street types and spaces they overlook. Shared private drives are only to be accommodated in instances where Lanes are unachievable.</p>
Footpaths and Cycle Routes	<p>Pedestrian and cycle provision should be accommodated within all street typologies ensuring that pedestrian and cycle movement is equitable to that of vehicles. In some instances, where not adjacent to / within the vehicular carriageway, informal paths meander through areas of green space and larger areas of public open space. In these instances, paths should be well lit, safe to use and follow clear and direct sight lines.</p>

Table 5.5: Street hierarchy

Utilities and services



Figure 5.14 Utilities and services - links to wider objectives and policy framework

key guidance

Future development at East of Halewood should accord with a comprehensive utilities strategy across the whole of the site and which is supported by utility providers. In all instances applicants will be required to demonstrate and ensure that that development of individual land parcels will not sterilise the ability to bring forward any other land within the site.

5.125 The East of Halewood masterplan has been influenced by the existing utility infrastructure which sits adjacent to or within the site. Several utilities traverse the site and along its edges, each with varying degrees of constraint. The adjacent plan (Figure 5.15) sets out the arrangement of the main existing utility infrastructure across the site and how proposed infrastructure (SuDS basins and new vehicular access points) can be delivered alongside.

5.126 Comprehensive development is an underpinning principle of the masterplan and a coordinated utilities strategy across all land parcels will be required in order to deliver a new residential neighbourhood which is sustainable and comprehensive.

5.127 There are a host of various lower order utilities situated primarily within the existing road infrastructure surrounding the site (i.e. telecommunication cables). Future development at East of Halewood will need to ensure that appropriate engagement with each utility provider is carried out and that a strategy for point of connection is agreed.

5.128 The main utilities influencing the site are identified in the table over the page.

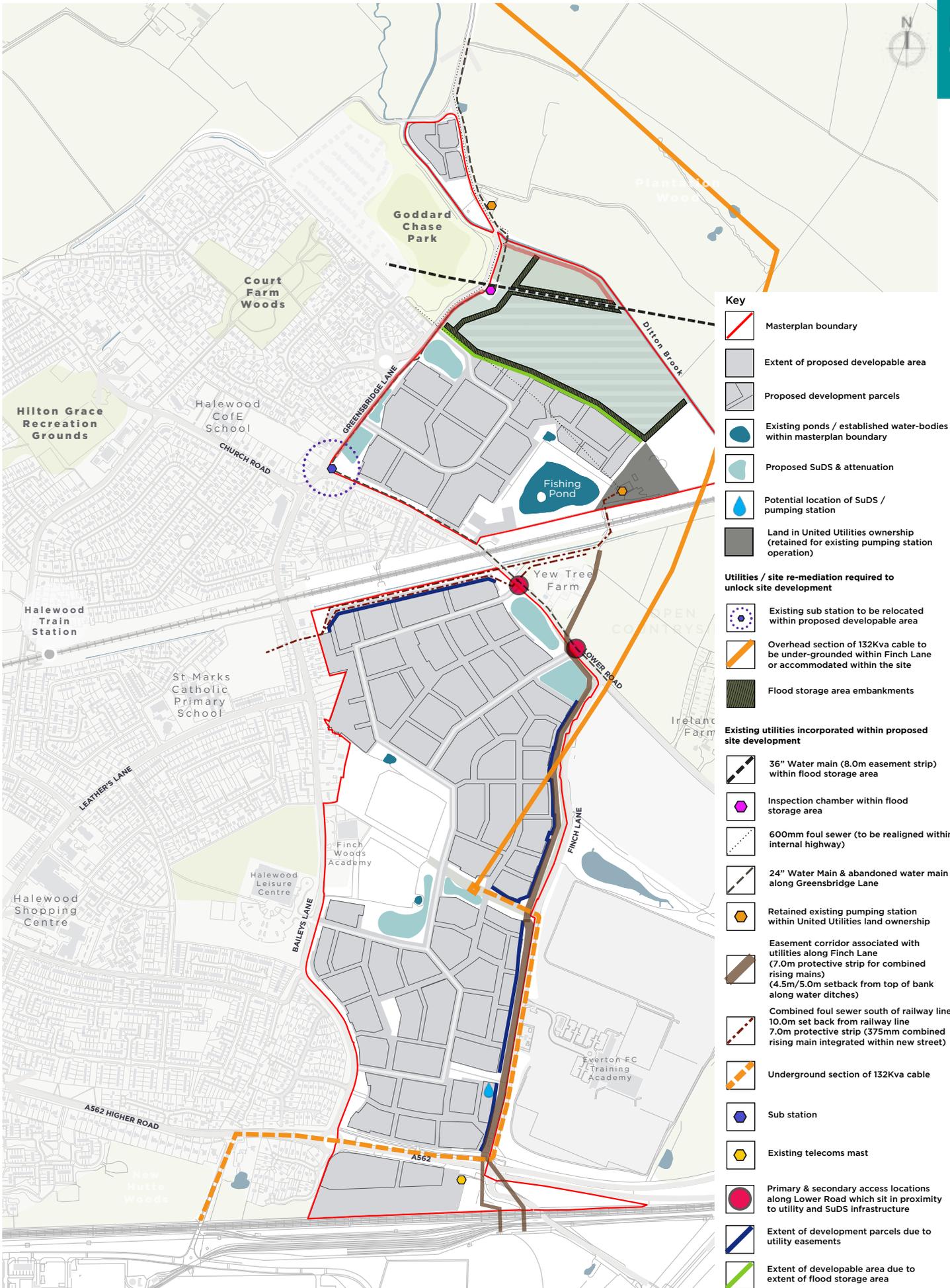


Figure 5.15 Utilities and services framework plan

Not to scale. © Crown Copyright Knowsley MBC 100017655. 2020

Utility Infrastructure	Location & Description	Easement required / impact on developable area
Pressurised 36" steel strategic trunk mains	Identified as strategically significant United Utilities infrastructure and cannot be diverted. Within FSA running from Goddard Chase, through United Utilities Inspection Chamber, across Ditton Brook and south of Plantation Wood. The trunk mains which currently sits 0.9m below the current ground level.	4.0m standoff either side of the pipe centre line. Restrictions on tree planting within the curtilage of water mains pipes. Note this easement requirement is not within the developable area of the site.
United Utilities inspection chamber	Located to the eastern edge of Greensbridge Lane. Currently buried structure.	Sits outside of the area proposed for flood storage. Opportunity to introduce planting to help limit it's visual impact.
Public foul sewer pipe	Currently runs across west to east across Greensbridge Lane to a pumping station located within United Utilities land parcel.	Current alignment can be diverted to accord with proposed internal street pattern whilst maintaining connection with pumping station.
24' Water main & abandoned water mains	Along the eastern edge of Greensbridge Lane. Identified as strategically significant United Utilities infrastructure and cannot be diverted.	Development to be setback from pipe and integrated within green corridor.
Rising mains pipes (450mm, 375mm and 300mm)	Runs parallel to Finch Lane and existing drainage ditches. They continue northwards and cross under Lower Road, connecting into the United Utilities Pumping Station.	7.0m protective strip.
Combined Foul Sewer (300mm, 375mm & 1800mm)	Passes through existing properties along Baileys Lane and runs parallel along the southern side of the Liverpool - Manchester railway embankment, across Lower Road and into Foul Pumping Station within United Utilities parcel.	7.0m protective strip for 375mm pipe and 5.0 easement for the 1800mm combined sewer. Only foul flows will be expected to communicate with the surrounding combined sewer network. This will be expected for all future applications that come forward in the masterplan area.
Ditton Brook	Ditton Brook along the northern edge of masterplan parcel 2 and southern edge of masterplan parcel 1.	8.0m easement required from top of bank from Ditton Brook to safeguard existing ecological features.
Electrical substation	On the corner of Lower Road and Greensbridge Lane.	To be relocated to a less visually prominent location.
Telecommunication network tower	Along Higher Road, towards the north-eastern corner of the Hesketh land parcel.	To remain in situ and be accommodated within future development proposals, Impact on visual amenity, with consideration given to orientation development frontage to limit overlooking views. Development setback may be required (to be confirmed with provider depending on nature of development proposals).

Table 5.6: Utilities considerations

Utility Infrastructure	Location & Description	Easement required / impact on developable area
132Kva High Voltage Cable (buried)	<p>Travel east along the existing PRoW before heading southwards along Finch Lane to an existing substation and onwards to Jaguar Land Rover.</p> <p>There are High Voltage (11kv) and Extremely High Voltage (33kv) electricity cables which run within the footpath along Higher Road and connect into the former RSPCA land parcel via Finch Lane to the same substation as the 132Kva cables.</p>	<p>Infrastructure with significant viability constraints which limit the opportunity to divert.</p> <p>Underground 132Kva cable is buried shallow which impacts opportunity to introduce new connections across this section of cable from Finch Lane.</p>

Overhead 132Kva Cable

5.129 An overhead 132Kva cable traverses the southern part of the site, from a transformer situated along the PRoW northwards across Lower Road and back to a substation. The current location and siting of the cables presents a constraint - it may impact upon developable area and could also pose challenges for successful placemaking and connectivity.

5.130 The masterplan proposes that the overhead section of the cables is either diverted along Finch Lane or accommodated within the site, in order to support securing successful placemaking objectives. There have been ongoing discussions with Scottish Power regarding the viability of the diversion, which has been supported.

Finch Lane utility constraints

5.131 Finch Lane hosts a number of existing utilities as identified in the table above. The table provides guidance on related easements / servicing provisions, but these will need to be reviewed and verified at pre-application stage.

5.132 The masterplan process has explored opportunities to deliver new vehicular and pedestrian access points into the site from Finch Lane. However, existing utilities may affect the viability of delivering such access route(s) and therefore it is assumed that access from Finch Lane will be restricted to a dedicated pedestrian and cyclist using the existing PRoW.

Existing substation

5.133 The existing substation on the corner of Lower Road and Greensbridge Lane currently occupies a visually prominent location, adjacent to an area with historic and characterful dwellings.

5.134 Future development has the opportunity to reinforce this existing junction with frontage development and high-quality open space as identified within the masterplan framework.

5.135 As noted within Chapter 05b of this document, the junction at Lower Road and Greensbridge Lane is also identified for improvement, which is likely to necessitate the relocation of the substation

New vehicular access connections

5.136 The proposed primary access points along Lower Road have been positioned to ensure that they do not adversely impact upon the existing combined rising mains and combined foul sewer pipes which are present in this part of the site. The section of Lower Road in this location is constrained by traversing utilities; however new access points here play a key role in providing interconnectivity between the northern and southern parcels as well as a viable point to deliver new access infrastructure for the site.

5.137 Their location is also balanced with the provision of SuDS basins in this location and must ensure that they can achieve the required visibility splay standards through planning applications.

› Design guidance

Chapter 6 supports the Masterplan Framework (Chapter 5) by providing design guidance relating to character areas, urban design, street design, green infrastructure and landscape.

Chapter 6 does not set fixed design parameters but instead provides guidance on how each of the masterplan framework principles could be interpreted and successfully applied in a manner deemed acceptable by the Council.

This chapter will help future applicants in understanding the place-making aspiration and benchmarking that the Council envisages for the East of Halewood and which delivers the objectives of the masterplan.

Whilst this guidance is not a rigid design code, future applicants will be required to demonstrate, through their planning applications how the design concepts and principles illustrated have been interpreted and applied.

The interpretation of the guidance will be a material consideration in the assessment of planning applications.

Links to National Design Guidance

6.1 The Design Guidance set out in the following chapter addresses the key peacemaking considerations for future development at East of Halewood. The chapter addresses these through a number of themes. Each supports the ten characteristics of well-designed places as set out in the NDG 2019.

6.2 The design guidance is intentionally strategic in its scope, with the aim of coordinating development across the site through common concepts and principles.

6.3 The holistic design approach structured by the masterplan framework in Chapter 5 is represented by the Illustrative Masterplan opposite (Figure 6.1). This is included for illustrative purposes, but serves to demonstrate the type of coordinated and inclusive development structure anticipated by the Vision and Masterplan framework.

6.4 The Illustrative Masterplan helps the interpretation of the Masterplan Framework and will be an aid to pre-application discussions. It informs, and should be considered alongside the guidance set out throughout Chapter 6.

6.5 The following sections provide a more detailed understanding of character areas, their structure, the specific place-making opportunities within them and the resulting key principles regarding movement, connectivity, materiality and form.

Chapter 6 Themes

NDG Characteristics

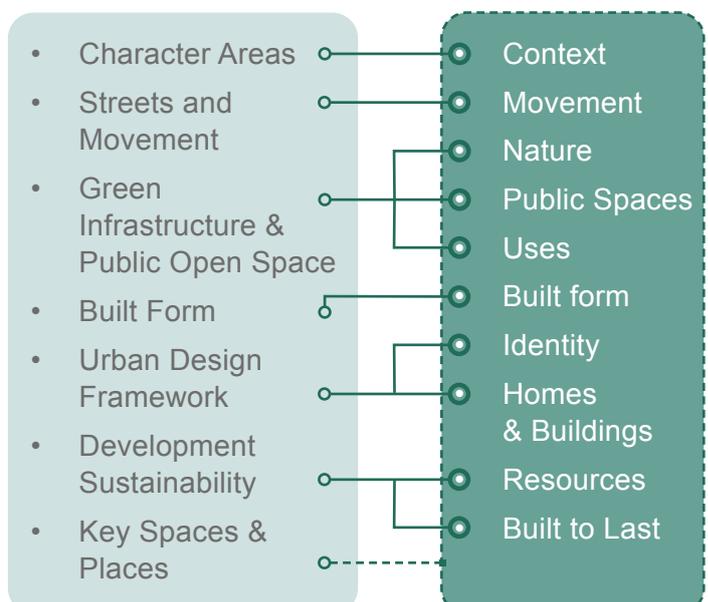




Figure 6.1 Illustrative masterplan

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 Map data: Google Earth (Data SIO, NOAA, U.S. Navy, NGA, GEBCO)

Character areas

Introduction

6.6 Future development at East of Halewood will create a visual link between Halewood's suburban edge and rural context. Given the scale of development proposed, character areas will play a key role in managing this transition from Halewood to the rural context.

6.7 Character areas set out principles around development densities, materials, landscaping and streetscape across the site. These are intended to deliver a development that is legible and has a genuine and successful sense of place. They are intended to create a sense of place across the various development areas which will be delivered by various developers.

6.8 The proposed density profile across the site sees a general increase in density as you move southwards and westwards.

6.9 The character area boundaries have been drawn with reference to their respective setting, their role within the wider community, the type of streets and spaces within them and a consideration of a viable and legible scale of neighbourhood. The character area profile north and south of the Liverpool - Manchester railway responds specifically to their contexts and opportunities. Importantly, character areas do not generally change across a street and overlap with adjacent areas where there are common features and elements from each area which could equally apply.

6.10 The character areas identified within the masterplan for East Halewood are as follows:

Community Core

6.11 The largest Character Area, this will play a key role in setting the overall feel of East Halewood as a place to live. It will comprise a range of high-quality family homes structured around pedestrian focused streets and local open spaces.

6.12 The Community Core handles the interface with the existing community in Halewood around Bailey's Lane, playing a key role in shifting that character of that route from an edge of settlement road into calmer, two-sided street.

- Generally medium density (c.30-35dph) with general increase in density from north to south;
- Will change the nature of frontage along Bailey's Lane and Higher Road to maximise the profile of East of Halewood as a high-quality new community;
- A legible and permeable street layout providing for good overlooking of streets with a relatively informal feel; and
- Contains local open spaces which are well connected to Finch Woods and other landscape features by permeable, pedestrian friendly links.

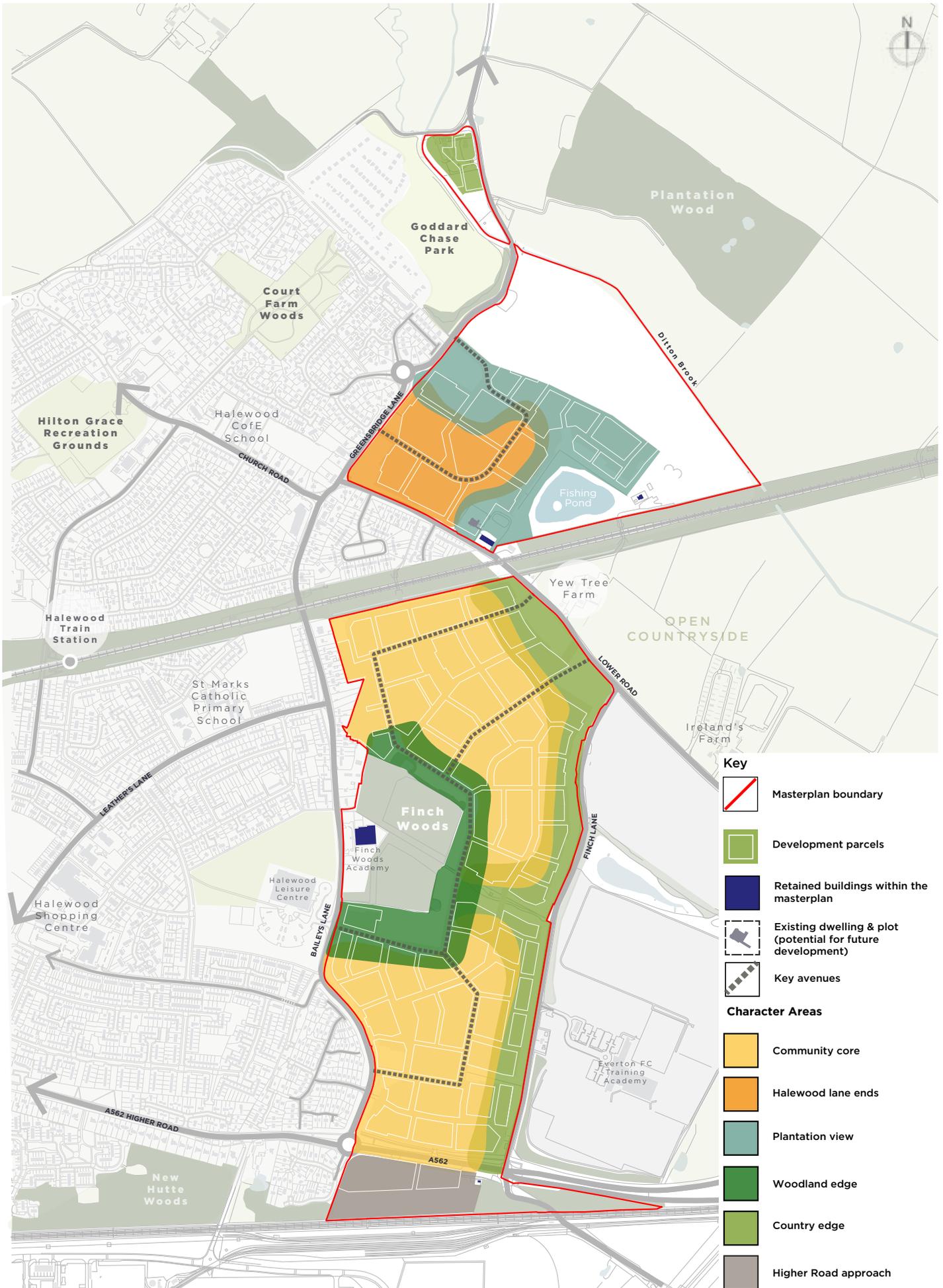


Figure 6.2 Character areas plan

Not to scale. © Crown Copyright Knowsley MBC 100017655. 2020

Woodland Edge

6.13 The green heart of the development, this area carries Finch Woods Park Way (bus route) around Finch Woods and will have an important role in defining how the development meets and integrates with the edge of Finch Woods. The scale and intensity of built form will represent a step up from the Community Core, creating a strong overlooking edge to the woodland as it is drawn into the wider landscape structure.

- To the south of Finch Woods, a welcoming gateway, comprising of development overlooking Baileys Lane and a high quality landscape space that connects the new residential community back into local Leisure facilities;
- Generally medium density (c.35-40dph) with opportunities for height in part, which overlook Finch Woods;
- Opportunity for 2.5 - 3 storey dwellings overlooking Finch Woods along Finch Woods Park Way;
- Prominent continuous frontages with a consistent building line and strongly defined public/private boundaries;
- Potential to incorporate SuDS features alongside the existing woodland edge of Finch Woods; and
- High quality and direct links to the existing PRoW, Finch Woods, Bailey's Lane and the Leisure Centre to the west.

Country Edge

6.14 This area handles the interface between the new community edge and the surrounding countryside. Future development should be outward facing, towards the rural character of Finch Lane and its junction with Lower Road. This is the most visible part of the site as you arrive from the east towards Halewood and therefore this Character Area has an important role in creating a positive first impression of the area.

6.15 It is important to capitalise upon its special setting and outward facing views, helping to deliver a high-quality living environment. As such it is envisaged to be relatively informal in character with materials and built form that hints at a more rural feel.

- Lower density area (c.25-30dph) handling transition to open countryside;
- Presenting a 'soft' gateway, the development working with Yew Tree Farm to create a key space on Lower Road, with prominent high quality landscape, and sustainable drainage systems;
- Encompassing and supporting the existing PRoW and associated public open space;
- Responding to easement restrictions and neighbouring uses along Finch Lane, and;
- Informal / organic streets fronting on to amenity green space / SuDS features.

Higher Road Approach

6.16 A relatively small area positioned between Higher Road and the railway line, development in this location will play a key role in shaping the sense of arrival to Halewood as a whole; providing positive frontage that helps to change the nature of major road infrastructure.

- Higher density, mixed use development (c.50dph) associated with the key access points into Halewood, from the A561 (Higher Road) & A562 (Speke Boulevard) providing a sense of enclosure on entering the urban area;
- Providing appropriate design solutions to achieve mitigation from noise (uses of acoustic fencing should be avoided);
- Establishing a building form which creates a positive and defined sense of arrival on approach to Halewood from the east, by allowing future development to occupy the current layby space, and
- Potential for mixed-use, capitalising upon its close proximity to infrastructure and taking advantage of roadside profile.

Halewood Lane Ends

6.17 A natural extension to the existing community that has grown around the historic hamlet of Halewood Lane Ends. The look and feel of this area will be influenced by neighbouring residential properties and its interface with the local shopping parade on Baileys Lane.

- Opportunity for a public realm and highway interface that makes a positive contribution and linkage to the existing community;

- Design and materials to be influenced by historic vernacular within existing settlement;
- Medium density (c.30-35dph) but retaining a lower-rise informal character; and;
- Grouped frontages with some limited variation to building line reflecting proximity to and character of surrounding settlement.

Plantation View

6.18 The northernmost section of development, this area faces into an undevelopable area of flood storage around Ditton Brook with attractive long-range views beyond to woodland plantations to the north. It provides an opportunity for a highly attractive residential frontage that provides a positive face to the area.

- Gateway open spaces designed to be functional and attractive landscape assets that welcome you to the site;
- Outward facing development which capitalises upon the high quality long range views and which forms a coherent and attractive northern edge to the East of Halewood;
- Generally lower density (c.30dph) with prominent continuous frontages;
- Building scale steps up towards the open space to give a strong sense of overlooking; and;
- Opportunities for larger properties that capitalise on the attractive landscape setting.

Urban design framework

6.19 The application of considered urban design principles play two main roles in helping to define the site;

1. The arrangement of building frontages, their relationship with streets and spaces and with landmark buildings to help to coordinate the environment within the masterplan: to create a coherent sense of place and;
2. The location and treatment of arrival gateways, key views into the site and the relationship and aspect of new development in relation to Halewood will determine how successfully new residential development integrates with existing suburban areas.

6.20 The access and movement framework (Figure 5.13) establishes the strategic access and movement parameters and principles for the site. The urban design framework builds upon these principles, the objectives of the East of Halewood SPD, the masterplan vision and objectives, demonstrating how the role of building form, orientation, grain, massing and scale should contribute to a successfully integrated and coherent development structure.

6.21 The urban design framework promotes the creation of human scaled, safe and animated streets and public spaces, which are read as a legible townscape. The framework plan illustrates various urban design components including:

- Location of key / landmark buildings and spaces;
- Significant arrival gateways and key internal nodes;
- Significant views into and within the site;
- Frontage types.

6.22 Any future development will be designed to minimise the opportunities for anti-social behaviour and crime through best-practice urban design principles that maximise passive surveillance as well as adhering to the advice and guidance set out in Secured by Design and CABE Designing Out Crime.

6.23 Further guidance is provided in the summary table at the end of the chapter, which illustrates how considerations around form and scale should be applied within each of the character areas.



Figure 6.3 Urban Design framework - links to wider objectives and policy framework

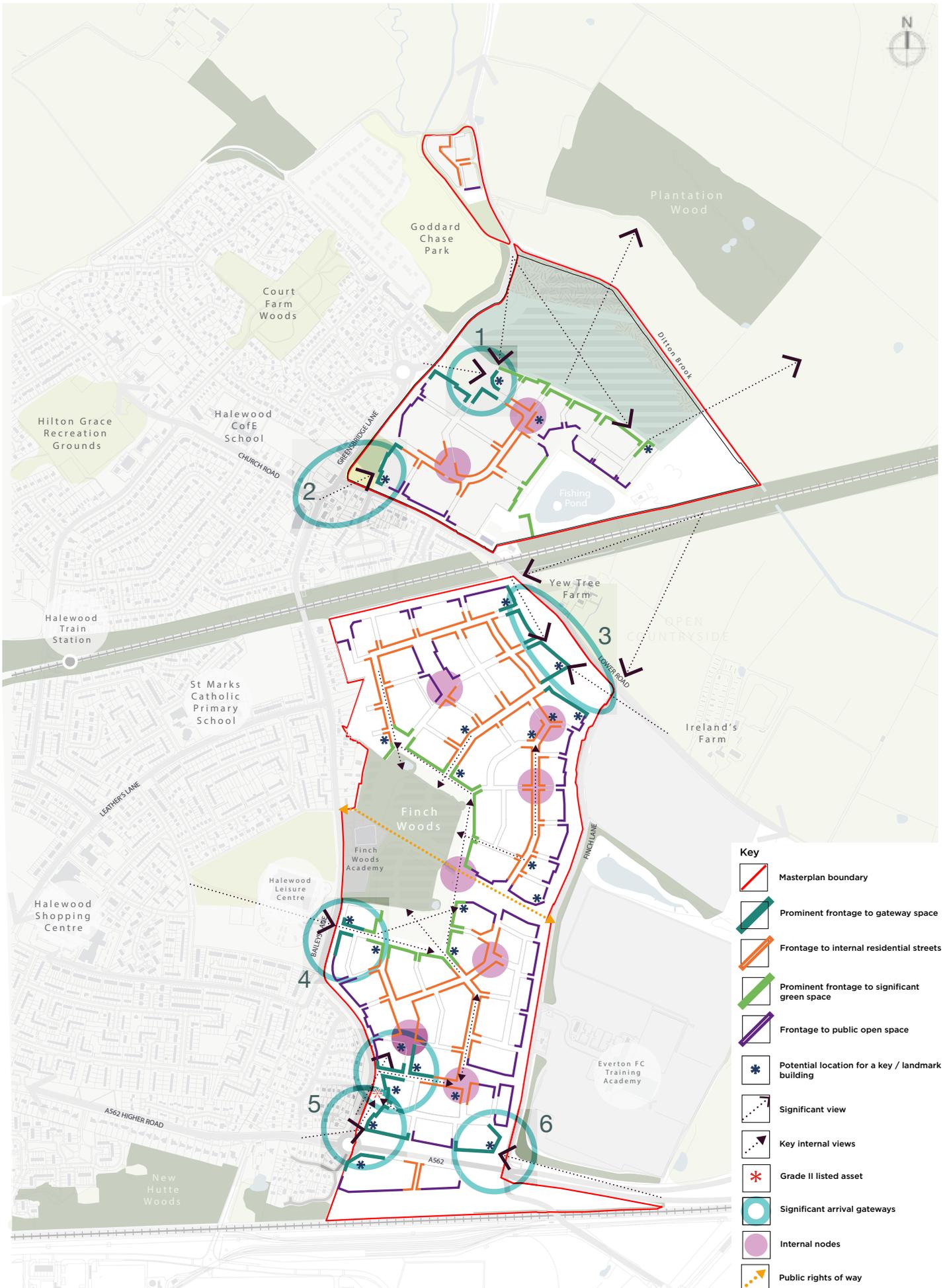


Figure 6.4 Urban Design Framework Plan

Not to scale. © Crown Copyright Knowsley MBC 100017655. 2020

Location of key / landmark buildings

6.24 The location of key / landmark buildings should be carefully considered as these components of a residential townscape help to reinforce important local nodes, street hierarchy and wayfinding across the site. The role of landmark buildings is to help people orientate themselves within the development as well as reinforcing the significance of key spaces, routes and nodes.

6.25 The urban design framework illustrates where key / landmark buildings should be located. Within the context of the movement and landscape frameworks, these locations ensure that buildings are on visually prominent locations, such as corners of development parcels, along Avenue streets and Neighbourhood Streets and/or capping internal view corridors.

6.26 They can form part of the composition of arrival gateways as well as becoming established singular landmarks within character areas. They should be expressed with considered differences to the form and appearance of their surrounding buildings. Variances in the expression of landmark buildings could include;

- Differing ridge / eaves line;
- A building of greater scale and massing;
- A building which sits proud of the surrounding building lines;
- An altered building orientation or;
- Sensitive and considered variations to façade detailing and materiality / colour, for example a painted or rendered finish.

6.27 Landmark buildings are located across a number of character areas, and therefore the application of the above examples should be used only where appropriate in relation to the overall character and sense of place of each character area.

Significant arrival gateways

6.28 The primary points of access will form significant arrival gateways as you enter the site from the existing highway infrastructure. These gateways will form thresholds, between existing and new built environments or between new built environments and the surrounding landscape. They will establish the placemaking benchmark and establish positive perceptions of East of Halewood from the outset.

6.29 Across all arrival gateways, the following general principles should be applied;

1. New built form and landscape spaces within these gateways must create a positive visual impact, welcoming pedestrians, cyclists and vehicles into the site and enticing them to explore further;
2. Development and the landscape design should embrace their immediate context, through built form characteristics and detailing or through the use of landscape spaces and SuDS features;
3. Areas of public use and highways should be safe, welcoming and connected to the internal movement network and the dedicated pedestrian and cycle route where necessary. These areas should be designed and constructed to inclusive design principles and specifications.

6.30 Two new key arrival gateways are proposed along Greensbridge Lane and the junction of Greensbridge Lane and Lower Road. They play a significant placemaking role;

1. At the northern access into the site from Greensbridge Lane will become a gateway, given its prominent and visible relationship to the proposed Flood Storage Area and Greensbridge Lane. It will form part of the approach view of the Plantation View character area and therefore the quality of space and arrangement of the built form is important.
2. The gateway which addresses the historic Halewood Lane Ends plays a key role in reinforcing the local crossroads and character of the historic buildings. This location is where new development will have its most direct visual relationship with the existing built context. The relocation of the existing substation in this visually prominent location creates an opportunity to visually and physically connect the site back to Halewood. A high quality 'village green', alongside play provision, offer views into the development from Baileys Lane and Church Road as well as creating an accessible pedestrian gateway to the northern development parcel.

6.31 Four new key arrival gateways are proposed to the south of the Liverpool – Manchester railway line, each of which play a different but significant placemaking role;

1. Access into the site from Lower Road is comprised of two Avenue streets. It occupies a prominent location along Lower Road and will influence the quality of the arrival experience in both directions. Built form is orientated towards Lower Road, creating an outward facing development frontage, capitalising upon views of the viaduct

arches along Lower Road. The junction between Lower Road and Finch Lane is also redefined, with prominent frontages sitting behind historic hedgerows, redefining the countryside edge character at this junction. The quality of the proposed SuDS and surrounding landscape will also integrate the development with the surrounding landscape and retained historic hedgerows, creating a quieter and more rural edge to the development.

2. New development is integrated with historic hedgerows, an enhanced Finch Woods and SuDS features. It will play a key role connecting development with existing communities and facilities, achieved through a dedicated pedestrian cycle route and good quality pedestrian crossings. The character at this gateway should reflect the medium density of existing residential areas surrounding the Halewood Leisure Centre, with a tighter urban grain and opportunities to increase the scale of buildings to three storeys in prominent locations, visually linking development back with Halewood. Development is coordinated on both sides of the Avenue Street, creating enclosure on approach before views are opened up to reveal Finch Woods, the SuDS features and new development fronting onto Finch Woods.
3. The southernmost primary access along Baileys Lane comprises of public space, SuDS features, the Grade II Listed asset and overlooking frontage. Landmark buildings located on corners, addresses open spaces and creates enclosure to these spaces and streets. They also can be partly visible from Baileys Lane, setback behind retained historic hedgerows with rooflines and eaves protruding above the existing hedgerows. The setting of the Grade II Listed asset is preserved with the sensitive arrangement

of new development orientated towards the gravestone. Development overlooks this space, set back 27m to respect the setting of the asset and to enclose the proposed improved landscape space.

4. The Higher Road corridor becomes a significant arrival gateway travelling westbound. The combination of new development frontage, landmark / key buildings and a reconfigured carriageway, (incorporating a widened central reservation and removal of the existing lay-by) will create a positive visual approach to Halewood. There is the opportunity to establish a landmark building on the south-eastern corner of the former RSPCA parcel. New landmark buildings could also be located around the Baileys Lane and Higher Road roundabout, on both the former RSPCA and Hesketh land parcels. These landmark buildings should be orientated towards Higher Road. Each building could be 3 storeys (or higher on the Hesketh land parcel) to create greater enclosure and presence onto Higher Road.

6.32 Gateway spaces 2, 3 and 4 form key spaces which are described in further detail in Chapter 06f.

Internal nodes

6.33 Internal nodes create distinctive features within the urban structure and which contribute to the overall legibility and placemaking quality of the place. These play an important role in providing localised areas of interest and reinforce the street hierarchy. Internal nodes can be irregularly or regularly shaped residential spaces, formed at the junctions of vehicular and pedestrian routes, and may be emphasised by landmark buildings or groups of buildings and appropriate landscape setting.

6.34 The urban design framework identifies potential locations of internal nodes which are dispersed across the masterplan where significant junctions / open spaces / key buildings / internal views / boundary treatments combine to create an area of importance. Developers should respond to these opportunities with ideas for distinctive built form and open space, creating visual markers across the character areas.

Significant views

6.35 New development will establish both significant external views as well as high quality views within the development. The urban design framework identifies opportunities to create and capitalise upon significant external views, in particular but not limited to;

- Views south across the Flood Storage Area from Greensbridge Lane. An important view of the development which sets the quality benchmark;
- Attractive longer distant views towards Plantation Wood and northwards and eastwards;
- Framed views into the development from Baileys Lane and Church Road;
- Arrival views from the Manchester – Liverpool railway line, offering panoramic

views across the development;

- Approach views from Lower Road and Higher Road; and
- Long distance views of development approaching the Halewood Leisure Centre from Halewood Shopping Centre and along Higher Road corridor.

6.36 A number of internal, more localised views are also highlighted on the urban design framework plan. These views are often characterised by landmark / key buildings. Internal views towards Finch Woods should also be encouraged through the alignment of the internal street structure and alignment of building frontages. Opportunities for internal views complement the Avenue and Neighbourhood Street hierarchy. As you travel along Local Streets and Lanes, quality internal views should still be created, albeit they may become more informal and less significant to those along Avenues and Neighbourhood routes. Adjacent and connecting street scenes should respond appropriately to internal nodes.

Layout, building frontage and orientation

6.37 The urban design framework establishes a permeable layout which encourages the use of perimeter blocks, with building frontages orientated towards streets and spaces. Pedestrian and cyclist movement should be encouraged freely through all parts of the masterplan. Cul-de-sacs should be avoided as they create indirect and disconnected pedestrian and cycle networks and result in disorientating environments.

The urban design framework identifies the following frontage typologies in response to the spaces / streets they address.

Prominent frontage to gateway space

- Main development frontage orientated to overlook gateway spaces which sit in front of the new development;
- Avoid rear fencing onto gateway space where possible;
- Frontage should be coordinated and consistent in these locations to reinforce a consistent character onto the spaces they define;
- Opportunity for landmark buildings in prominent locations to aid with legibility.

Frontage to internal residential streets

- Main development frontages orientated to address internal streets;
- Frontage animated with front door access, windows and vehicular access;
- Frontage should be coordinated on both sides of the street to reinforce street hierarchy and character.

Prominent frontage to significant green space

- Main development frontage orientated to address Finch Woods and the Flood Storage Area;
- Frontage animated with front door access and windows. Lower order streets (and limited use of private drives) provide front door access;
- Avoid rear fencing onto green space;
- Frontage should be formally arranged and consistent to address these spaces;
- Opportunity for landmark buildings in prominent locations to aid with legibility.

Frontage to public open space

- Main development frontage orientated to overlook public open spaces, creating a positive edge treatment and interface between development parcels and public open space. They should provide high level of passive surveillance;
- Frontage animated with front door access and windows. Lower order streets should be animated and provide front door access.

Movement and street hierarchy design guidance

Introduction

6.38 The following chapter builds upon the spatial masterplan framework principles described in Chapter 5F, setting out design guidance and details of how the various street typologies within the hierarchy could be designed.

6.39 Guidance around the design principles for urban form, materials and landscaping for each of the street levels will be set out, helping to deliver a coherent design response with a strong sense of place and local distinctiveness for East of Halewood.

6.40 For each street type, a minimum separation distance is recommended that is consistent with the Council's SPD 'New Residential Development' (September 2018) Appendix 4. The SPD provides specific detail regarding interface distances, however it does also state that any reduction below this can be agreed with the LPA on a plot by plot basis and for the exception of dual aspect properties.

6.41 The guidance set out in the following pages supports the SPD position of a minimum separation distance, which can be further tested at the application stage.

Street hierarchy overview

6.42 The following guidance describes the street hierarchy, the palette of materials considered appropriate to the development and illustrates the proposed character of the streets and spaces.

The guidance is informed by:

- Department for Transport's Local Transport Note 2/08 October 2008: Cycle Infrastructure Design
- Manual for Streets 1 and 2 (MFS);
- Ensuring a choice of travel SPD (KMBC); and;
- Car Parking What Works Where? (English Partnerships, 2006)



Figure 6.5 Street movement & hierarchy - links to wider objectives and policy framework

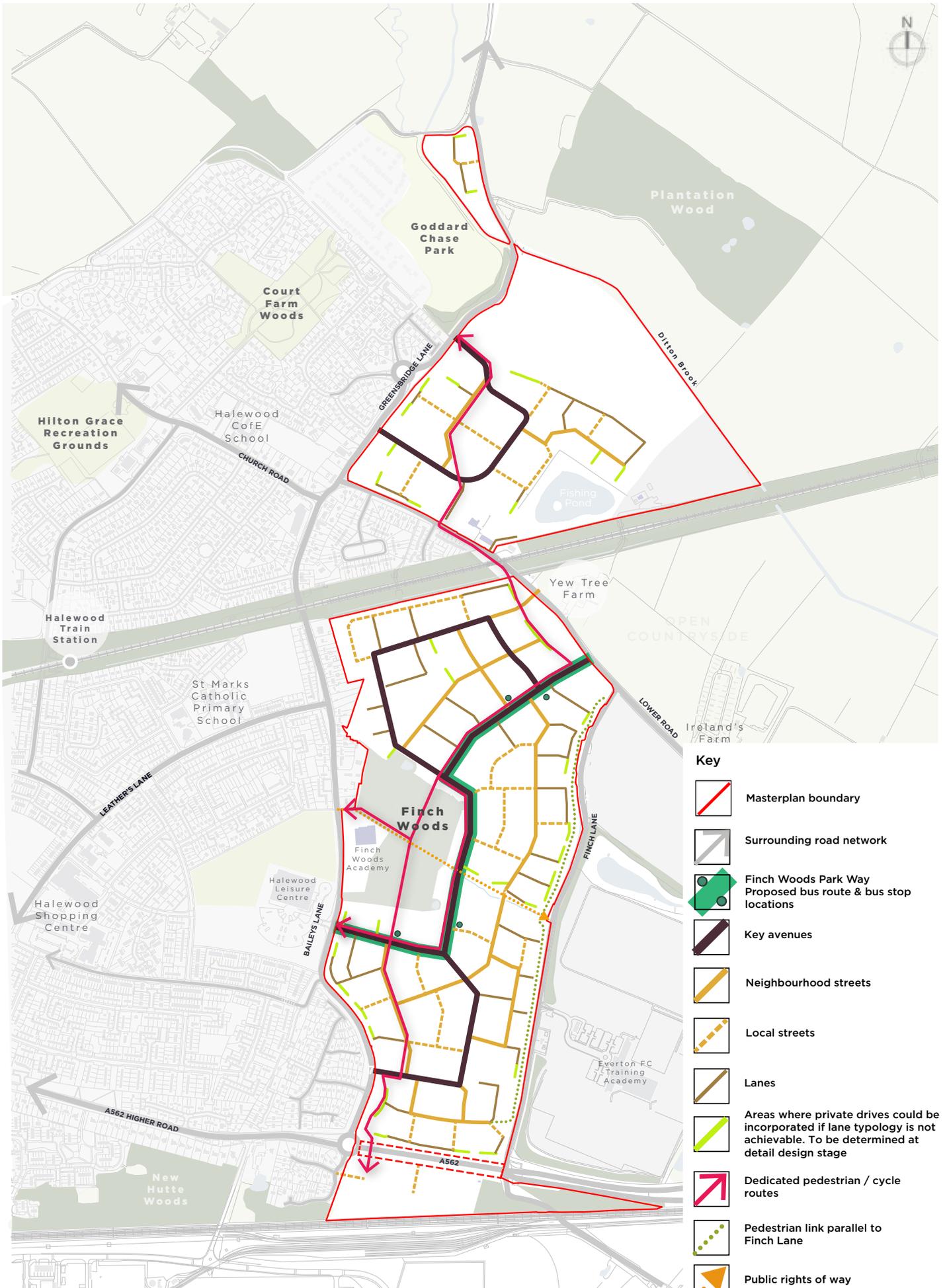


Figure 6.6 Street Hierarchy Plan

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Avenues

Avenues will play a unifying role across the site, connecting it to the existing street network. They will be suitable for buses (in part along Finch Woods Park Way), cyclists, pedestrians and cars. They will distribute the highest volumes of traffic through the development, feeding through to connecting neighbourhood and lower order streets.

Key Characteristics

Key characteristics of the Avenues include:

- Avenues will form gateway entrances to the site with street planting framing the space;
- Street geometry is designed to naturally calm traffic speeds, through angled bends reacting to shifts in building lines and spaces and avoiding sweeping geometries;
- Provision of a 2.1m planted verge with formal avenue street trees along both sides of the street;
- Parallel visitor parking spaces will be provided within the depth of planted verge;
- Typically 2m footpath on either side however a 3m dedicated cycle / footpath will run alongside the carriageway as required;
- Four bus stops (2 pairs) to be located on Finch Woods Park Way (identified by the thicker green line on the adjacent plan, north and south of Finch Woods).



Figure 6.7 Finch Woods Park Way & Avenue street locations

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Criteria	Avenues
General	
Maximum Speed	20mph
Adoption	Designed and built to adoptable standards
Public Transport	
Bus Access	Yes (in part)
Bus Stops	Yes (in part) - 2 pairs of stops provided – location and infrastructure facilities to meet Mersey Travel standards
Street Design Details	
Carriageway Width	6m
	6.75m where a bus route is to be provided
Footway and cycleways	2 x 2m minimum
	(with 1 x 3m combined facility where required)
Verge	2m each side
	Verge to increase in size and incorporate seating, along bus route, up to 3m on each side
Vehicle Swept path to be accommodated	Car, KMBC refuse vehicle and bus (in part)
Stats Services (excluding storm and drainage)	Within footway
Parking	On plot / visitor off-carriageway in defined parallel bays within depth of planted verge
Direct Access to Properties	Yes
Refuse collection and storage	On street collection, storage to rear of property
Raised table / traffic calming measures	Buff / bracken Keyblock paving or similar and approved. The ramps on traffic calming measures must be constructed in tarmac (or state bituminous material) to avoid future maintenance problems i.e. no block paving on the ramps
	Allowance for road narrowing at PRow crossing as feature measure/gateway
	Conservation block paving along centre and edges of carriageway to create visual narrowing
Street Landscaping	
Planting	Avenue street trees (2 every 12m subject to residential driveways and access) within verges
	Diverse planting within widened verges along bus routes to create a linear park appearance
Street Signage	Cast aluminium signs RAL 226 – green / RAL 9005 – Black /RAL 9010 - White (with no through road symbol where appropriate) as per KMBC specification
Street Lighting	Lighting columns (KMBC approved specification) - Black /RAL 9010
	Typically located at back of verge
Plot Boundaries	Low brick wall with metal railings (total height 1.1m) - no piers

Table 6.1: Typical Avenue street details

Avenues



Materials

Carriageway - Hot rolled asphalt as per KMBC specification



Carriageway Kerb - Grey pre-cast concrete kerb or similar



Visual Carriageway Narrowing - Silver Grey Marshalls Conservation block paving or similar and approved



Crossings - Buff / natural tactile paving where applicable



Footpath - Bituminous surface as per KMBC specification



Dedicated Pedestrian and Cycle Path - Asphalt with buff colour aggregate



Driveway - Natural / charcoal Marshalls Piora Keyblok paving or similar and approved



Table 6.2: Typical Avenue street materials

Finch Woods Park Way



Figure 6.8 Typical Finch Woods Park Way axo

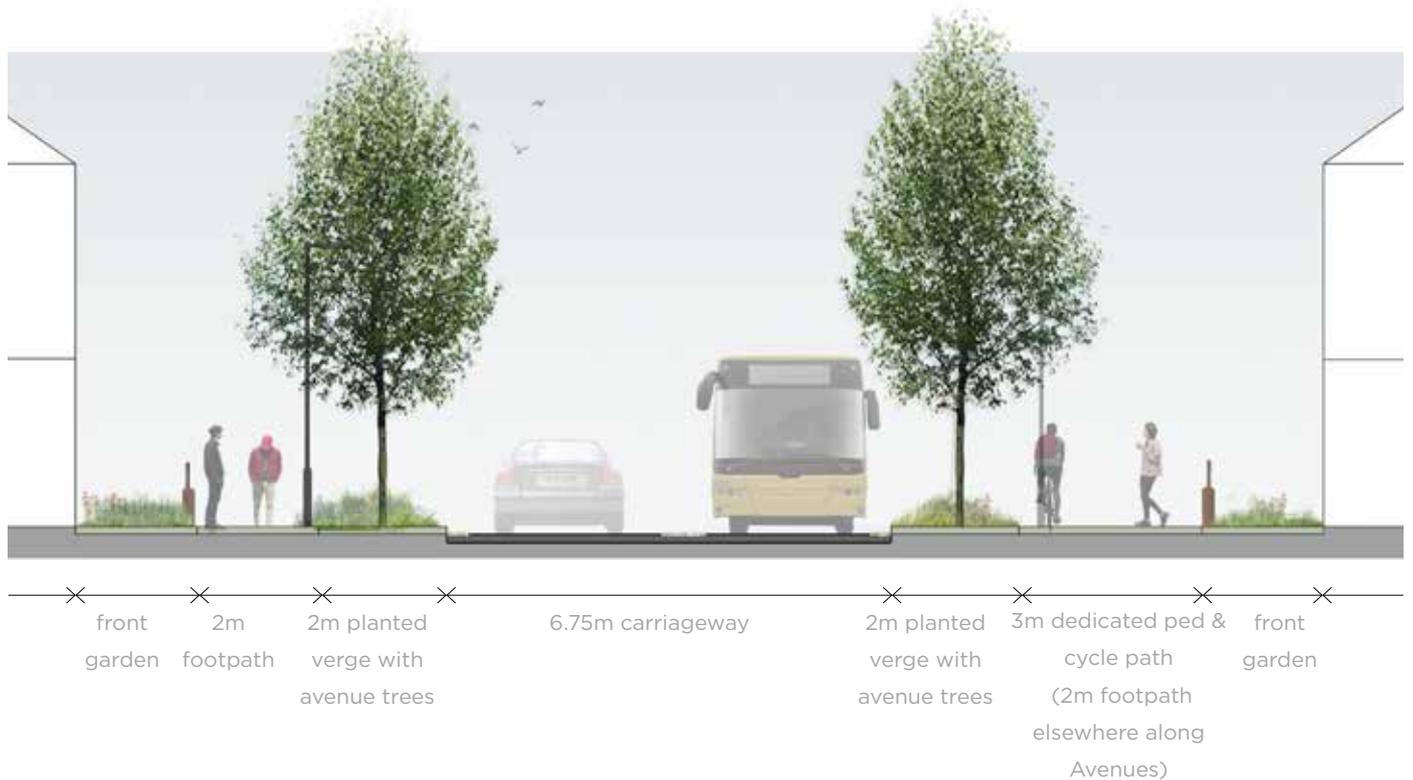


Figure 6.9 Typical Finch Woods Park Way section

Typical avenue (no bus route)



Figure 6.10 Typical Avenue street axo



Figure 6.11 Typical Avenue street route section

Avenue fronting public open space



Figure 6.12 Typical Avenue street fronting POS axo

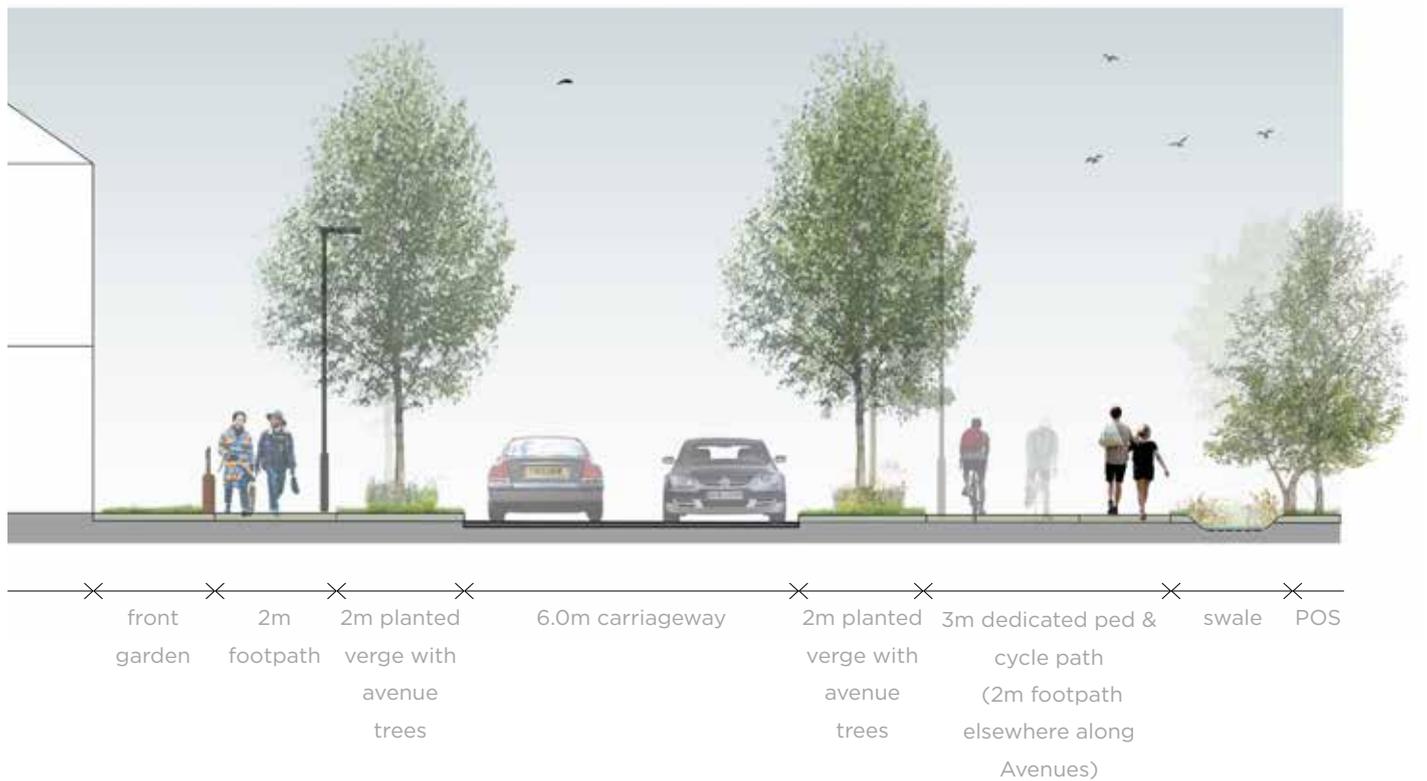


Figure 6.13 Typical Avenue fronting POS section

Neighbourhood streets

Neighbourhood Streets connect from Avenues and give access directly to development parcels as well as lower order streets.

In combination with Avenues, Neighbourhood Streets form connecting loops within the site creating a legible and connected network.

Key characteristics

Key characteristics of neighbourhood streets include:

- Garden depth variable with low brick wall with metal railings and formal hedge occasional ornamental planting;
- Front to front distance should be no less than 20m;
- Driveways accessed from carriageway;
- 2m footpaths on each side of the carriageway; and
- Intermittent street trees to be located around visitor bays and along the carriageway where possible, with some trees located in wider front gardens.

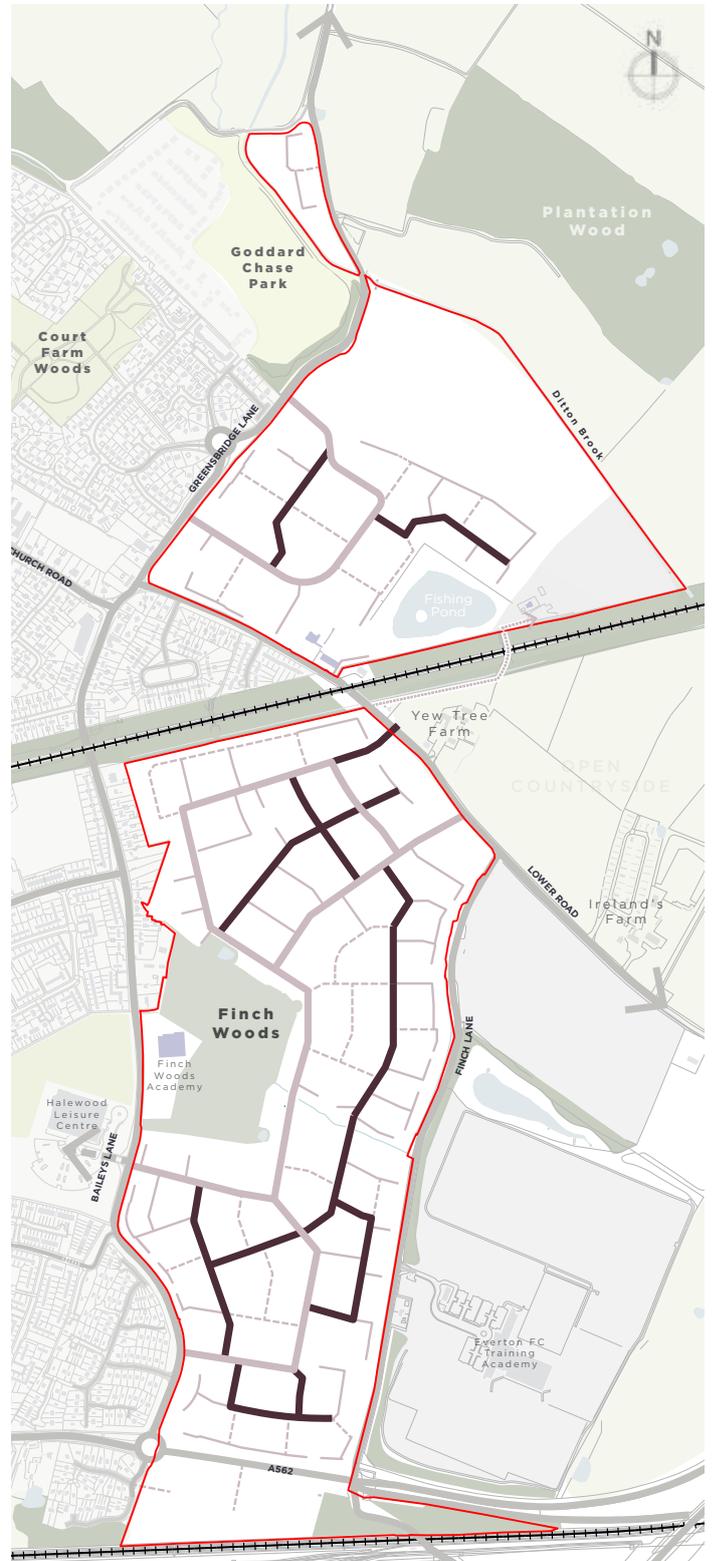


Figure 6.14 Typical neighbourhood street locations

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Criteria	Neighbourhood Streets
General	
Maximum Speed	20mph
Adoption	Designed and built to adoptable standards
Street Design Details	
Carriageway Width	5.5m
Footway and cycleways	2 x 2m (min) Cyclist share vehicular carriageway
Vehicle Swept path to be accommodated	KMBC refuse vehicle / Car
Stats Services (excluding storm and drainage)	Within footway
Parking	On plot / visitor on street Parallel Bays (min 2.1m)
Direct Access to Properties	Yes
Refuse collection and storage	On-street collection, storage to rear of property
Street Landscaping	
Planting	Intermittent street trees located between on-street parking bays (1 every 12m subject to residential driveways and access) within verges
Street Signage	Cast aluminium signs RAL 226 – green / RAL 9005 – Black /RAL 9010 - White (with no through road symbol where appropriate) as per KMBC specification
Street Lighting	Lighting columns (KMBC approved specification) - Black /RAL 9010 Typically located at back of verge
Plot Boundaries	Railings (total height 1.1m)

Table 6.3 Typical neighbourhood street details

Neighbourhood streets



Materials

Carriageway - Hot rolled asphalt as per KMBC specification



Carriageway Kerb - Grey pre-cast concrete kerb or similar



Visual Carriageway Narrowing - Silver Grey Marshalls Conservation block paving or similar and approved



Crossings - Buff / natural tactile paving where applicable



Footpath - Bituminous surface as per KMBC specification



Dedicated Pedestrian and Cycle Path - Asphalt with buff colour aggregate



Driveway - Natural / charcoal Marshalls Keyblok paving or similar and approved



Table. 6.4 Typical neighbourhood street materials

Typical neighbourhood street



Figure 6.15 Typical neighbourhood street axo



Figure 6.16 Typical neighbourhood street section

Local streets

Local Streets are characterised by a high-quality streetscape and a more enclosed street section. The street will be fronted along both sides, however building lines along these streets can become more informal with variable garden depths.

Key characteristics

Key characteristics of Local Streets include:

- Front to front distance should be no less than 20m;
- Garden depth variable with a hedge and areas of ornamental planting;
- Minimum 4.8m carriageway;
- Parking to be provided on plot to front or side of dwelling with visitor parking places sporadically within the carriageway;
- Suitable boundary treatment to protect the edges of the adjoining public open space areas where appropriate; and
- Tree planting within front gardens.

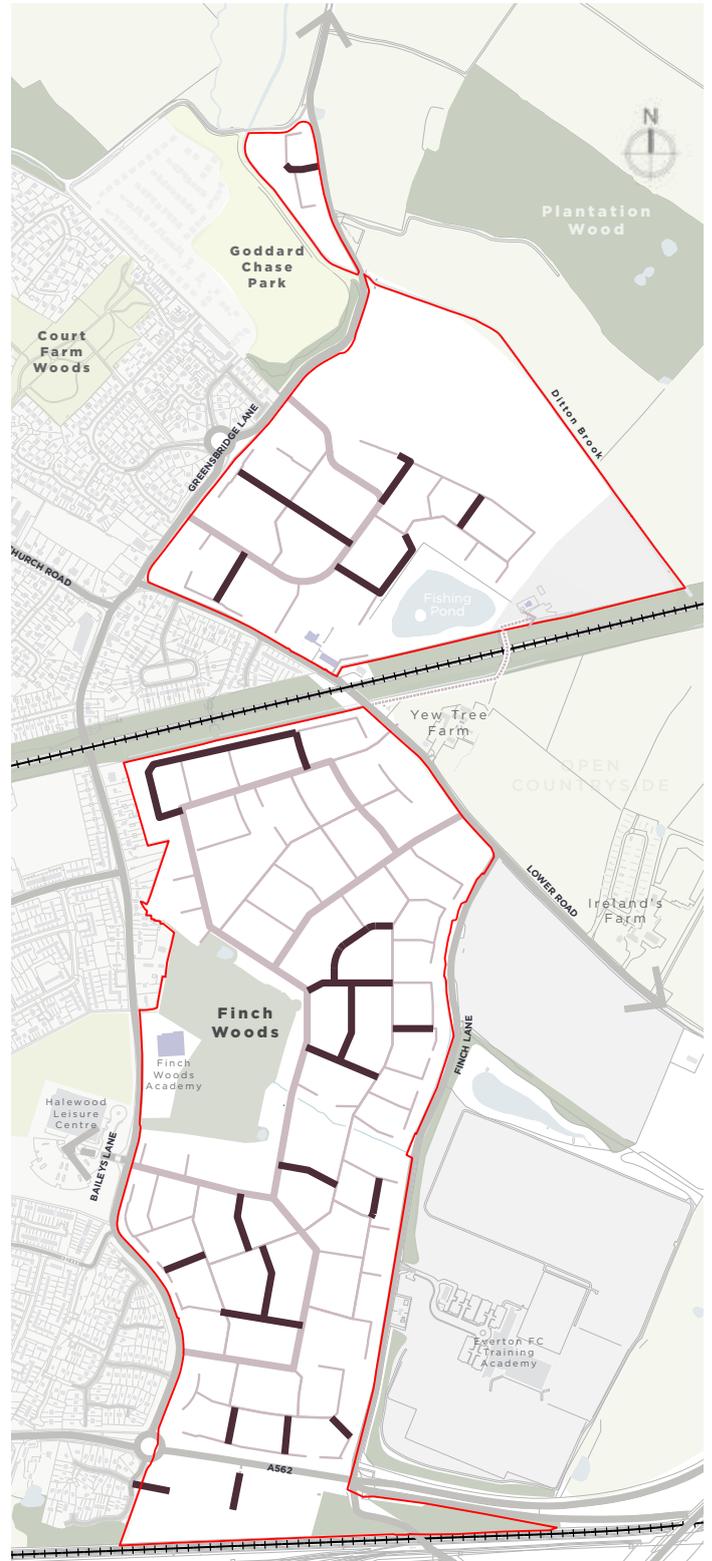


Figure 6.17 Typical Local Street locations

Not to scale. © Crown Copyright Knowsley MBC 100017655. 2020

Criteria	Local streets
General	
Maximum Speed	20mph
Adoption	Designed and built to adoptable standards
Street Design Details	
Maximum Number of Properties Served	25
Carriageway Width	4.8m minimum
Footway and cycleways	1 x 2m pedestrian footway, cyclists share vehicular carriageway
Service Margins	1 x 2.0m
Vehicle Swept path to be accommodated	KMBC refuse vehicle / Car
Stats Services (excluding storm and drainage)	Within service margins / within footpath
Parking	On plot to front or side of dwelling with potential visitor parking bays parallel to carriageway
Direct Access to Properties	Yes
Refuse collection and storage	On street collection, storage to rear of property
Street Landscaping	
Planting	Agreed shrub planting within service margins
Street Signage	Cast aluminium signs RAL 226 – green/RAL 9005 – Black/RAL 9010 - White (with no through road symbol where appropriate) as per KMBC specification
Street Lighting	To KMBC approved specification - Black/RAL 9010 Typically located to front of pavement/verge
Plot Boundaries	Formal hedge (0.6m height)

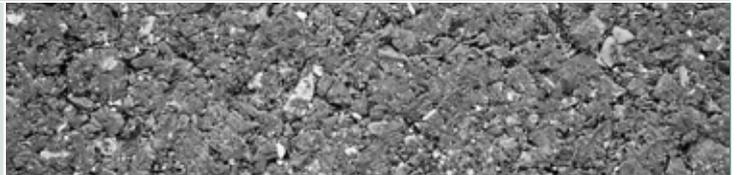
Table 6.5 Typical Local Street details

Local streets



Materials

Carriageway - Hot rolled asphalt as per KMBC specification



Carriageway Kerb - Silver Grey Marshalls Conservation kerb or similar and approved



Footpath - Silver Grey Marshalls Conservation block paving or similar and approved



Driveway - Bracken / natural Marshalls Keyblok paving or similar and approved



Table. 6.6 Typical Local street materials

Typical Local streets



Figure 6.18 Typical Local street axo



Figure 6.19 Typical Local street section

Lanes

Residential Lanes provide access to the quieter areas of the site. They will either include frontage along both sides of the carriageway or have single frontage onto public open space. The building lines along these streets can become more organic and playful with variable garden depths.

Key characteristics

Key characteristics of Local Streets include:

- Front to front distance should be no less than 20m;
- Garden depth variable with a hedge and areas of ornamental planting;
- Minimum 4.8m carriageway;
- Parking to be provided on plot to front or side of dwelling with visitor parking places sporadically within the carriageway;
- Suitable boundary treatment to protect the edges of the adjoining public open space areas where appropriate; and
- Tree planting within front gardens.

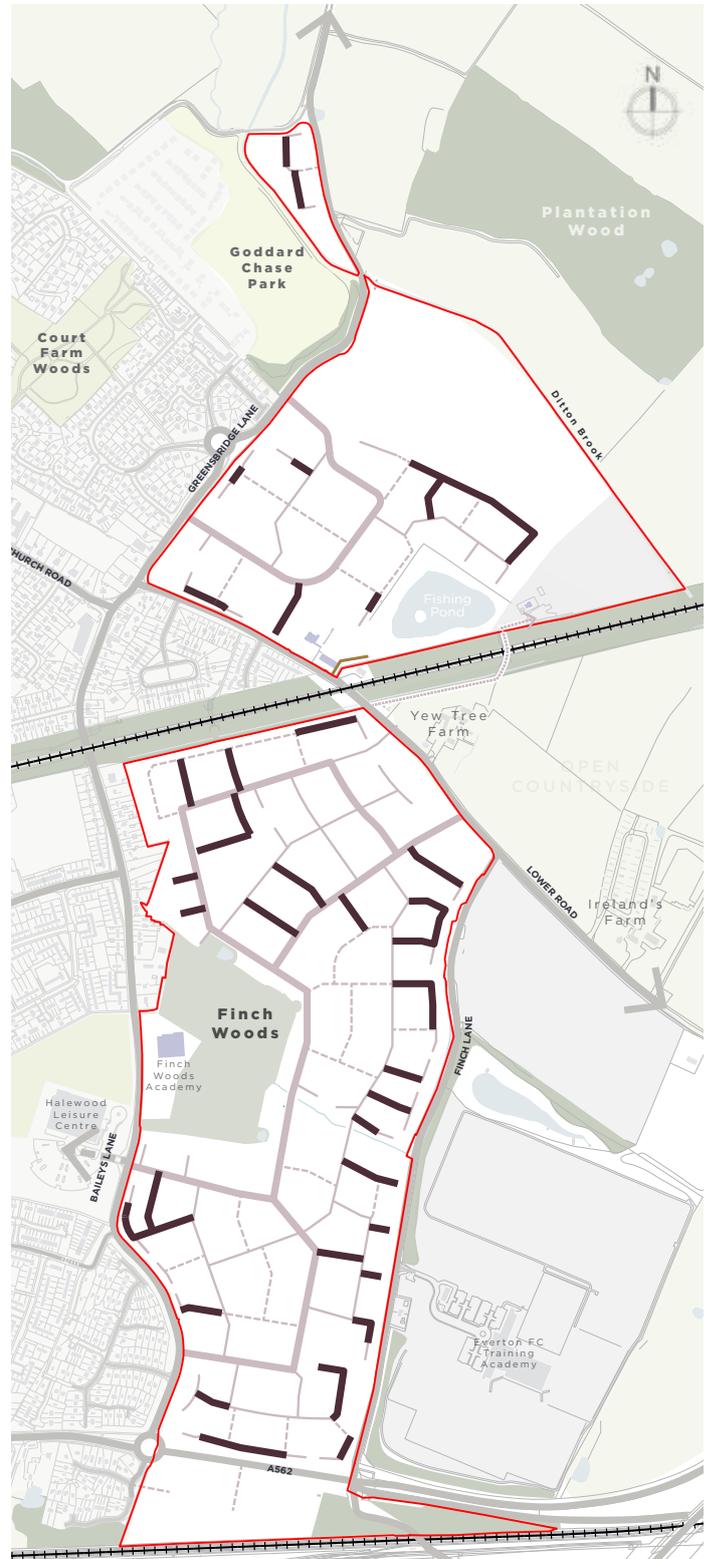


Figure 6.20 Typical Lane locations

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Criteria	Lanes
General	
Maximum Speed	20mph
Adoption	Designed and built to adoptable standards
Street Design Details	
Maximum Number of Properties Served	25
Carriageway Width	4.5m minimum
Footway and cycleways	Pedestrians and cyclists share vehicular carriageway
Service Margins	2 x 2m
Vehicle Swept path to be accommodated	KMBC refuse vehicle / Car
Stats Services (excluding storm and drainage)	Within service margins
Parking	On plot to front or side of dwelling with potential visitor parking bays parallel to carriageway
Direct Access to Properties	Yes
Refuse collection and storage	On street collection, storage to rear of property
Street Landscaping	
Planting	Agreed shrub planting within service margins
Street Signage	Cast aluminium signs RAL 226 – green / RAL 9005 – Black /RAL 9010 - White (with no through road symbol where appropriate) as per KMBC specification
Street Lighting	To KMBC approved specification - Black /RAL 9010 Typically located to front of verge
Plot Boundaries	Formal hedge (0.6m height)

Table 6.7 Typical Lane details

Lanes



Materials	
Carriageway - Pennant Grey Marshalls Tegula block paving or similar and approved	
Kerb - Silver Grey Marshalls Conservation kerb or similar and approved	
Driveway - Bracken / brindle Marshalls Keyblok paving or similar and approved	

Table. 6.8 Typical Lane materials

Typical Lane



Figure 6.21 Typical Lane axo



Figure 6.22 Typical Lane section

Shared Private Drives

Shared private drives are the lowest order street which can accommodate vehicles. Along with residential Lanes they will often provide access to dwellings overlooking greenspace and public open space. They are characterised by an overall manoeuvring space that accommodates vehicles, cyclists and pedestrians. Building lines can vary along these routes, create a more informal building line arrangement. The use of shared private drives should be limited.

Key characteristics

Key characteristics of shared private drives include:

- Front to front distance should be no less than 20m;
- Garden depth variable with a hedge and areas of ornamental planting;
- Minimum 4.2m carriageway;
- Parking to be provided on plot to front or side of dwelling with visitor parking places sporadically within the carriageway;
- Appropriate lighting;
- Suitable boundary treatment to protect the edges of the adjoining public open space areas where appropriate;
- Should be able to provide emergency access;
- Should accommodate pedestrian and cycle connectivity between private drives; and
- Are not to be adopted and are required to be maintained privately.

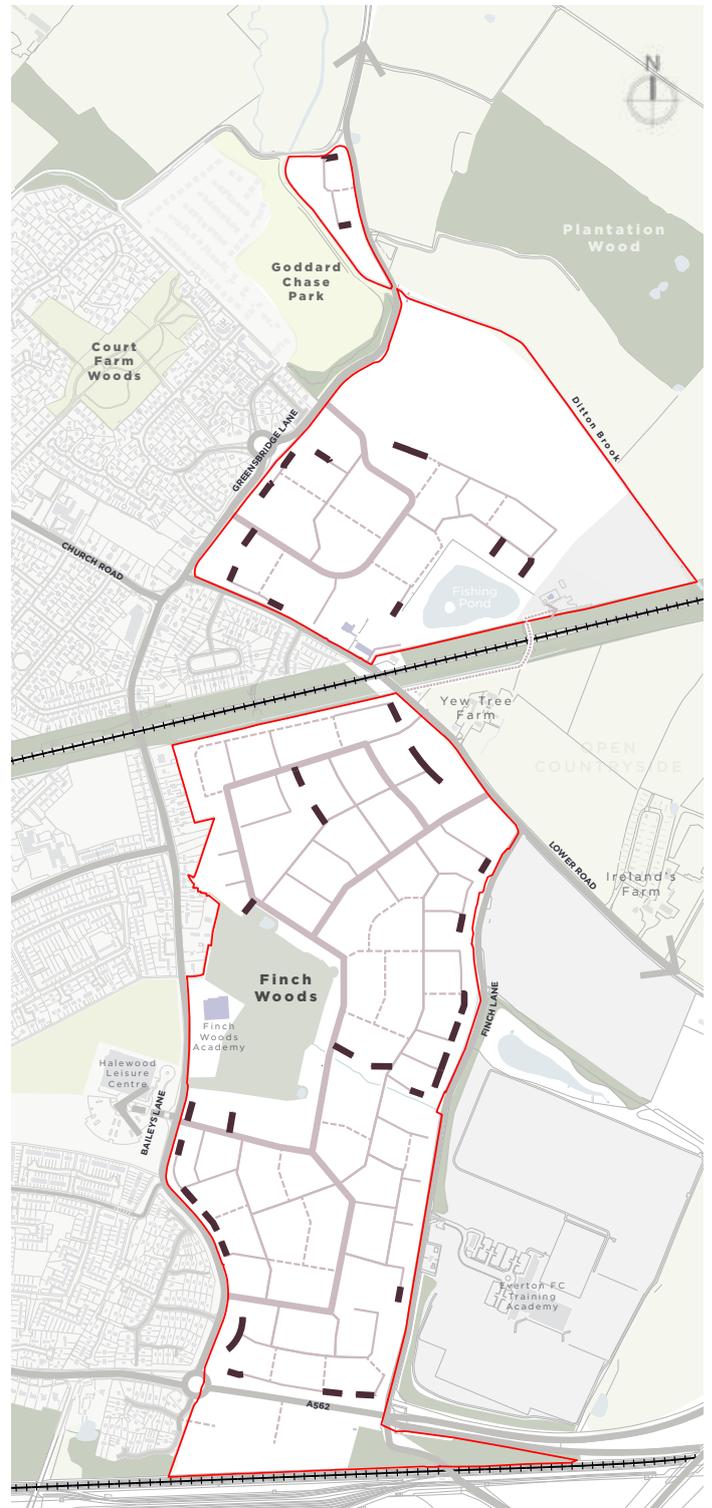


Figure 6.23 Typical Shared Private Drive locations

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Criteria	Shared Private Drives
General	
Maximum Speed	10mph
Street Design Details	
Maximum Number of Properties Served	3 dwellings or 25m length
Carriageway Width	4.2m minimum
Footway and cycleways	<p>Pedestrians and cyclists share vehicular carriageway</p> <p>Cycle and pedestrian connectivity between shared private drives should be accommodated as they are recognised as part of the street hierarchy</p>
Service Margins	1 x 2m
Vehicle Swept path to be accommodated	Car
Stats Services (excluding storm and drainage)	Within service margins / within footpath
Parking	On plot to front or side of dwelling with potential grouped visitor parking bays off carriageway
Direct Access to Properties	Yes
Refuse collection and storage	On street collection, storage to rear of property
Street Landscaping	
Planting	Agreed shrub planting within service margins
Street Signage	Cast aluminium signs RAL 226 – green / RAL 9005 – Black /RAL 9010 - White (with no through road symbol where appropriate) as per KMBC specification
Street Lighting	<p>To KMBC approved specification - Black /RAL 9010</p> <p>Typically located to front of verge</p>
Plot Boundaries	Formal hedge (0.6m height)

Table 6.9 Typical Shared Private Drive details

Shared Private Drives



Materials

Carriageway - Pennant Grey Marshalls Tegula block paving or similar and approved



Kerb - Silver Grey Marshalls Conservation kerb or similar and approved



Driveway - Bracken / brindle Marshalls Keyblok paving or similar and approved



Table. 6.10 Typical Shared Private Drive materials

Typical Shared Private Drive



Figure 6.24 Typical Shared Private Drive axo



Table 6.25 Typical Shared Private Drive section

Dedicated Pedestrian & Cycle route

A dedicated walking and cycling route will provide connectivity north-south across the site, as well as connecting to existing local facilities and proposed open space destinations. The provision of such a route ensures that pedestrian and cycle movement is promoted within a safe and designated route.

Key characteristics

Key characteristics of the dedicated pedestrian and cycle route include:

- Routes framed by trees and shrub planting;
- Street furniture placed along the route where appropriate;
- Well lit and visually open to increase security and use along highway network;
- Cycle parking to be incorporated at key locations such as play areas;
- Providing strategic north-south connectivity within the site;
- Providing key links west towards facilities in Halewood and connections to Finch Woods; and;
- Providing a link between the main northern and southern parcels underneath the railway arch creating an opportunity for place making and lighting feature.

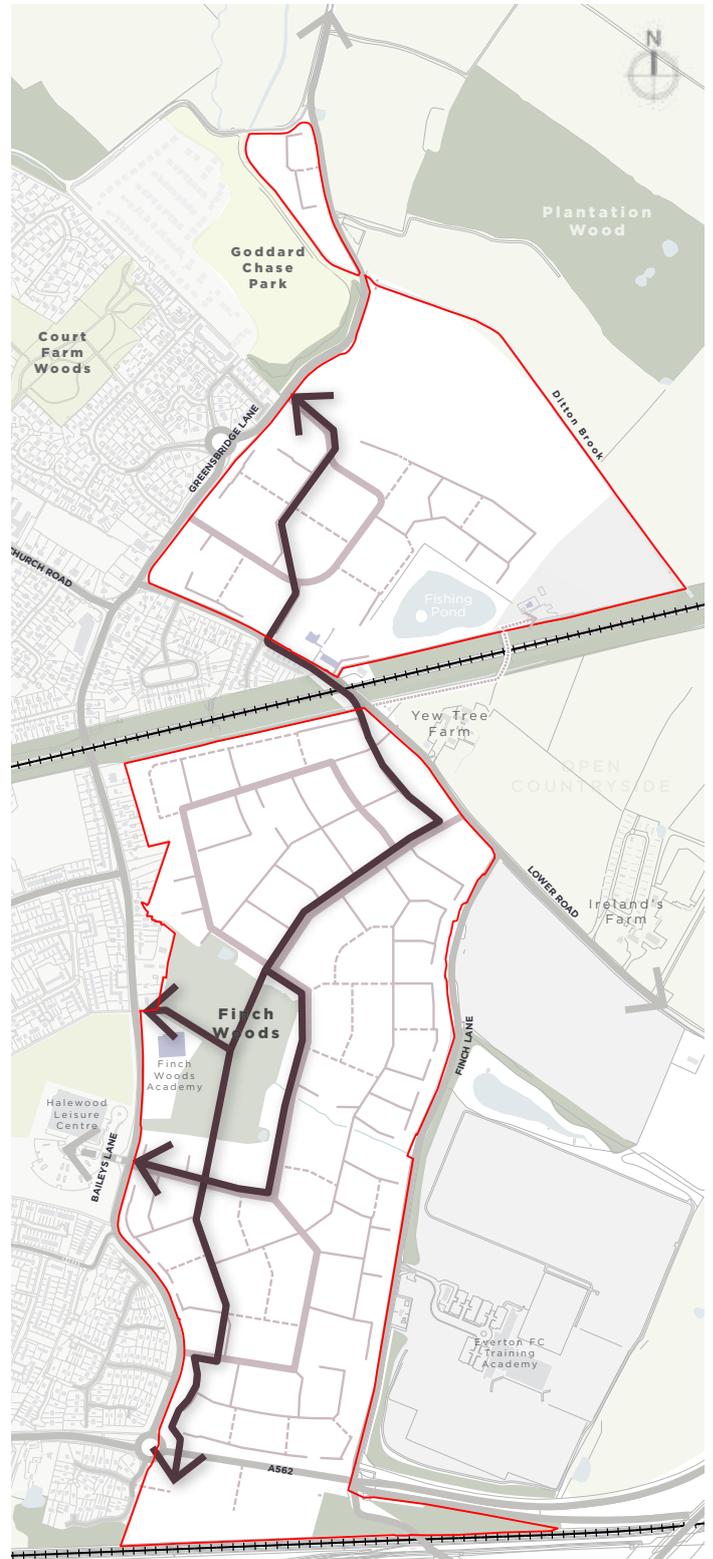


Figure 6.26 Typical dedicated ped / cycle route locations

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Criteria	Dedicated Pedestrian / Cycle Route
Street Design Details	
Foot / Cycleway Width	3m
Adoption	Designed and built to adoptable standards
Street Landscaping	
Planting	Informal tree groups, ornamental planting and wildflower meadow in areas of POS / Avenue street trees within grass / meadow verges and SuDS Swales along Avenues
Street Signage	Wayfinding finger post to incorporate East of Halewood branding and logos
Street Lighting	Lit under highway designation

Table 6.11 Typical dedicated pedestrian / cycle route details

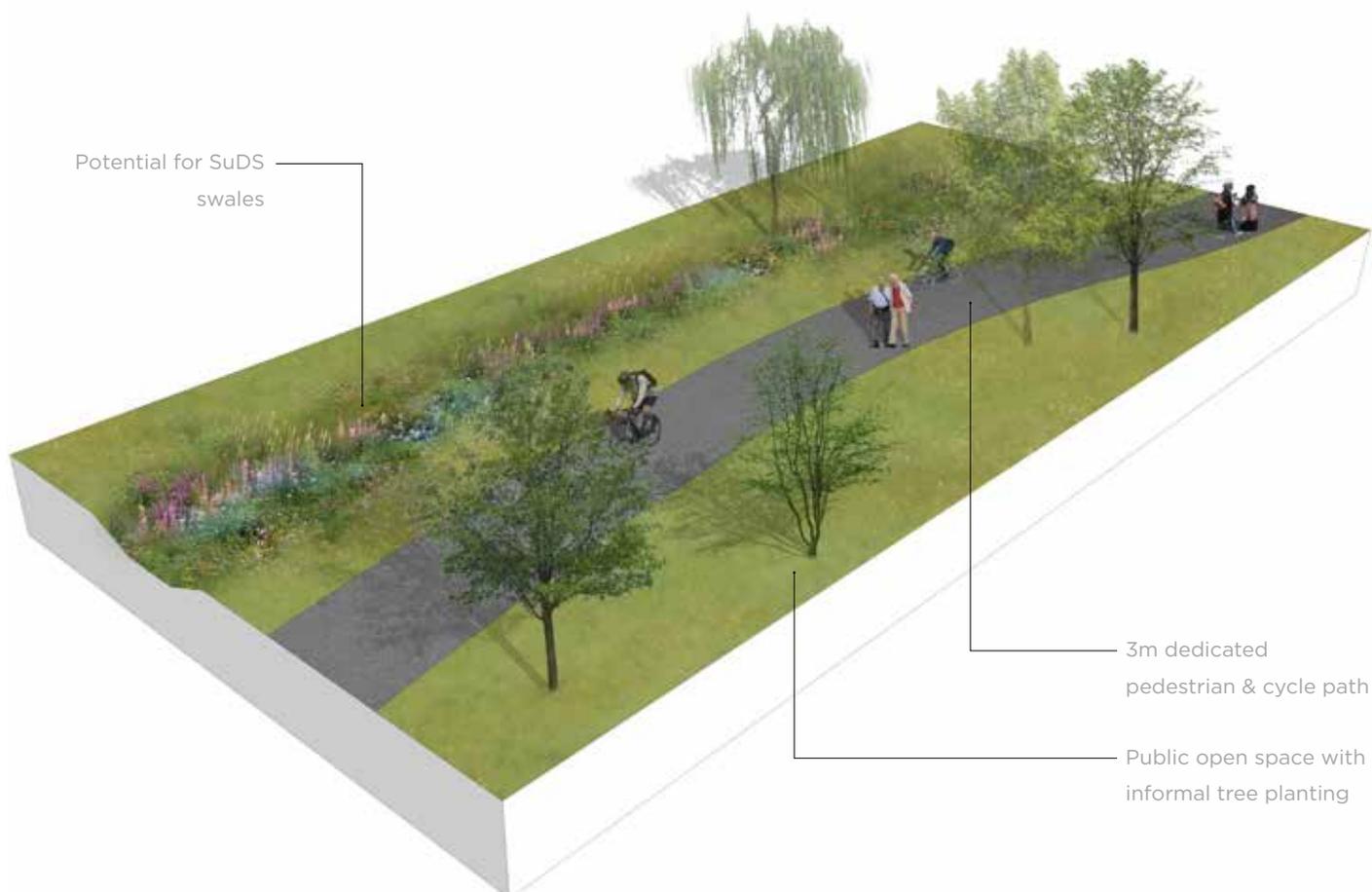


Figure 6.27 Dedicated pedestrian & cycle route axo

Pedestrian and cycle routes



Figure 6.28 Typical dedicated pedestrian / cycle route section through higher order carriageways



Figure 6.29 dedicated pedestrian / cycle route section through public open space



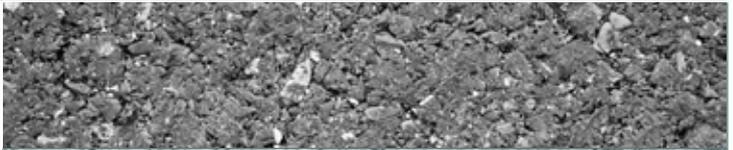
Materials	
Dedicated Pedestrian and Cyclepath - Hot rolled asphalt as per KMBC specification	
Dedicated Pedestrian and Cyclepath - Grey pre-cast concrete edging	
Crossings - Tactile paving where appropriate	

Table. 6.12 Typical dedicated pedestrian and cycle route materials

Public Right of Way Upgrades

The existing PRow that runs through the site will be upgraded to present a uniformed width and surface material along the majority of its route.

Road narrowing and a change of materials will be provided where the PRow crosses Avenues and Neighbourhood Streets.

Key characteristics

Key characteristics of the PRow include:

- Consistent, accessible pedestrian route;
- Change in materials where PRow crosses Avenues and Neighbourhood Streets;
- Inclusion of tree, shrub and meadow planting to create an attractive environment;
- Planting should not impede natural surveillance or create hiding spaces.

Criteria	Dedicated Pedestrian / Cycle Route
PRow Design Details	
Path Width	2m
Adoption	Designed and built to adoptable standards
Landscaping	
Planting	<p>Informal tree groups, ornamental planting and wildflower meadow</p> <p>All shrub/hedge planting along route to be maintained below 1m height</p> <p>All trees along route to be min. 2m clear stem</p>
Wayfinding Signage	Wayfinding Finger post to incorporate East of Halewood branding and logos
Lighting	Low level bollard lighting to KMBC adoptable standards

Table 6.13 Typical Public Right of Way details

Materials	
Public Right of Way - Hot rolled asphalt as per KMBC specification	
PRow - Grey pre-cast concrete edging	

Table. 6.14 Typical Public Right of Way materials

Parking strategy

Parking provision shall be made in accordance with the KMBC parking standards stated within 'Ensuring a Choice of Travel' SPD. All spaces and garages shall conform to the preferred dimensions set out in the document, unless otherwise agreed with KMBC. All car parking should be sensitively designed and integrated so that it does not visually dominate the streetscape and detract from the quality of the development being created.

Resident Parking

6.43 Resident parking will be off-street, predominately on-plot.

6.44 Parking spaces will be delivered in either a linear or tandem layout to the side or front of houses. However parking to the front of dwellings is only considered appropriate in areas of medium / high density and should be avoided where priority frontages are identified.

6.45 Tree planting and landscaping will be encouraged to improve the overall aesthetic of the parking areas and to provide visual breaks in their layout. If off plot, will be maintained by a specified management company.

6.46 Where apartment blocks and terraces are located, resident parking will be primarily facilitated through rear parking courts, and any communal parking areas will be limited to ten spaces. However, excessive frontage parking will not be acceptable due to its likely negative impact on the streetscape.

Visitor Parking

6.47 Visitor spaces will be primarily on-street, in formal bays, or in parking courts to the rear of apartments or terraces.

6.48 On Avenues and Neighbourhood Streets the visitor spaces will be in formal bays adjacent to the defined carriageway, and finished in hot rolled asphalt as per KMBC specification.

6.49 On shared surfaces and Lanes, the spaces will be in defined bays either adjacent to the carriageway or informally by localised widening of the carriageway. Such spaces will be in block paving to improve the aesthetic and reduce the proportion of asphalt surfacing across the site.

Cycle Parking

6.50 Cycle parking provision will be incorporated across the site with particular areas of focus around destination areas such as Finch Woods and the Grade II listed gravestone.

6.51 Cycle parking will be well located, safe and secure.

6.52 Covered cycle parking will be required for all residential dwellings in garages, secure sheds or cycle stores.

6.53 Secure, sheltered cycle stores, with good passive surveillance, are required for all apartments.

6.54 Where development includes properties such as town houses and detached / semi detached, developers will be required to demonstrate how EVC points are provided whilst ensuring that they do not dominate the appearance of the building facade or streetscape.

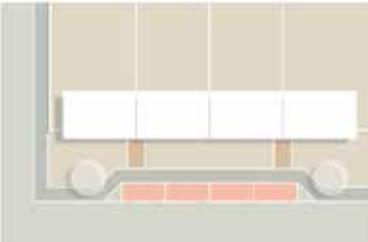
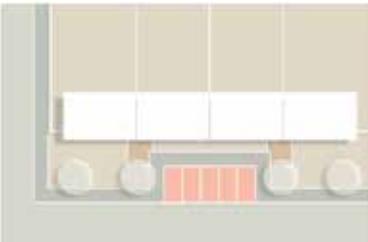
Parking Typologies - Unallocated Types	Description
<p>1. Parallel bays</p> 	<ul style="list-style-type: none"> • Parallel parking accessed from the street • Bays may be marked or unmarked • Bays should be broken up by street tree planting
<p>2. Perpendicular bays</p> 	<ul style="list-style-type: none"> • On-street head-on or perpendicular parking • Suitable where vehicle speeds are limited • Bays should be broken up by street tree planting

Table 6.15 Typical visitor parking typologies



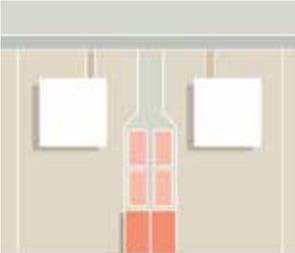
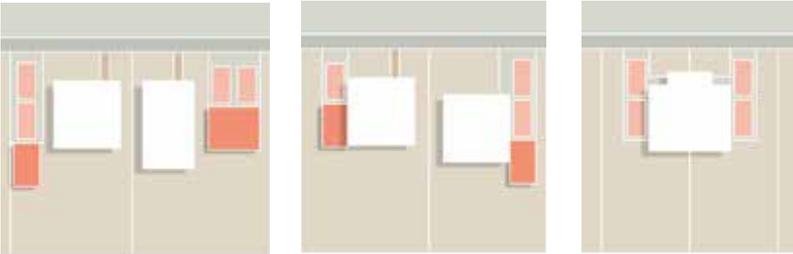
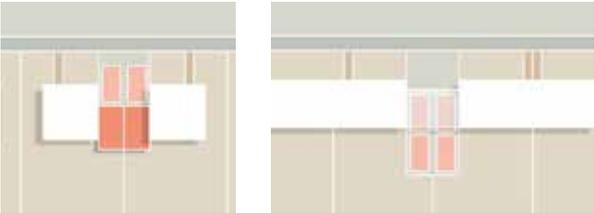
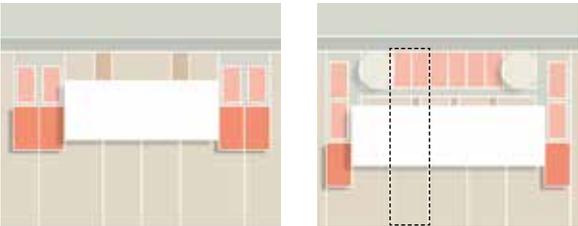
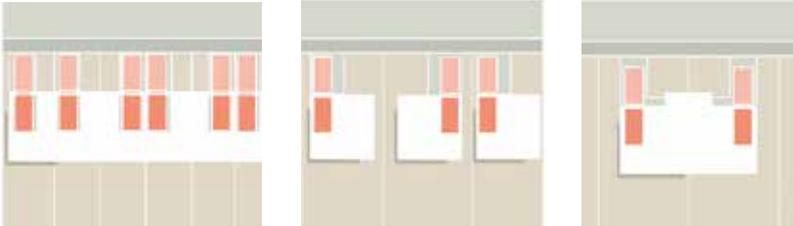
Parking Typologies - Allocated Types	Description
<p>1. On plot to rear</p> 	<ul style="list-style-type: none"> • On-plot rear parking arrangement • Single or double garages or hard surfacing • Detached or attached garages • Potential additional parking in front of garage
<p>2. On plot to side</p> 	<ul style="list-style-type: none"> • On-plot front / side parking arrangement • Single or double garage or hard surfacing • Detached or attached to dwellings • Potential additional parking in front of garage if to side
<p>3. Attached spaces or garages</p> 	<ul style="list-style-type: none"> • Grouped double garage or hard surfacing with potential for accommodation above garage • Garages could also be integral to house • Potential for parking to front of garage
<p>4. Grouped to side or front</p> 	<ul style="list-style-type: none"> • Parking grouped to sides or front for terraced properties • Spaces to front could be allocated or unallocated • Where spaces are positioned to the front, they should lie within the plot boundary of the associated dwelling
<p>5. Integral</p> 	<ul style="list-style-type: none"> • Applies to large detached, semi detached or town house dwellings • Access to garages overlooked by front of dwellings at ground floor level • Accessed via associated dwelling driveway

Table 6.16 Typical on plot parking typologies

Parking Approaches		Higher Road Approach	Community Core	Woodland Edge	Country Edge	Halewood Lanes End	Plantation View
On Street	Parallel	✓	✓	✓	✓	✓	✓
	Perpendicular	✓	✓	✓	✗	✓	✗
On Plot	To rear	✓	✓	✓	✓	✓	✓
	To side	✓	✓	✓	✓	✓	✓
	Attached space / garage	✓	✓	✓	✓	✓	✗
	Grouped side	✓	✓	✓	✓	✓	✓
	Grouped front	✓	✓	✗	✗	✓	✗
	Integral	✗	✓	✓	✓	✓	✓
	Integral town house	✓	✗	✓	✗	✓	✓

Table 6.17 **Parking principles summary**

The above table is intended to be used as a guiding principle only, to offer parking solutions that lessen the impact of parking within each of the character areas. The solutions are not seen as prescriptive, however through the planning application process, the Council will seek to ensure that sufficient consideration has been given to a well thought through parking strategy which supports the overall quality of placemaking.

EV Charging Points

6.55 EVC points should provide trickle spec charging as this is best reserved for long overnight charges at home and is typically provided by a standard 3 pin plug.

6.56 EVC points must be conveniently located for parked vehicles.

6.57 Colouring should be sympathetic to the dwellings materials.

Utilities

6.58 Utilities, machinery, gas, electricity, water, telecommunications and broadband will be located within services corridors under footways /service margins and highways where possible.

6.59 To minimise disruption to the streetscape and function of the highway, service margins should be allocated within the verge of Avenues and Neighbourhood Streets and for lower order streets, service margins will be included in 2m strips within the carriageway or beneath a planted verge.

6.60 Future development on the site will require a dowry deposit of materials from developers, so that if work is needed to utilities routes then highway/footway materials can be replaced like for like.

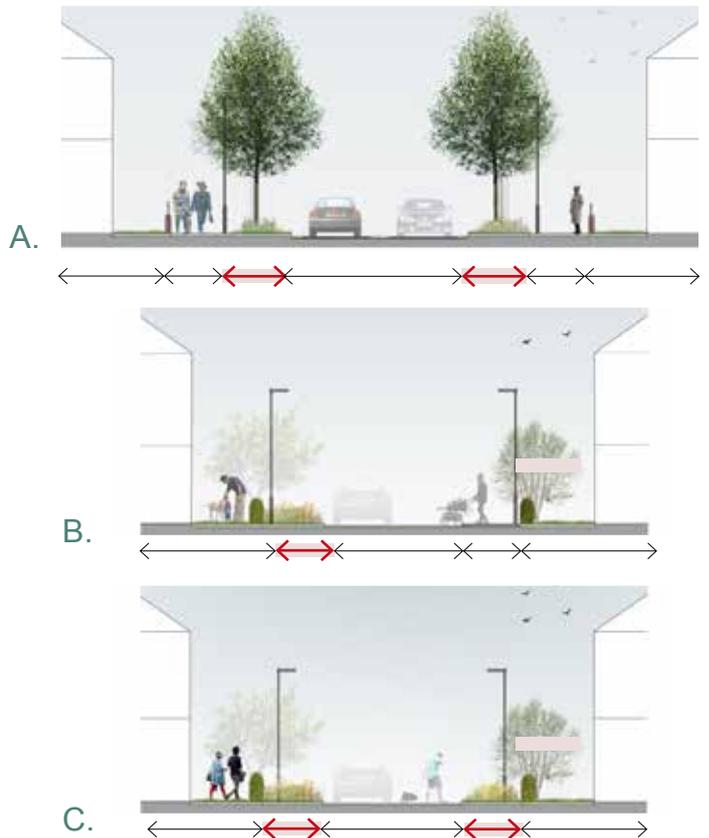
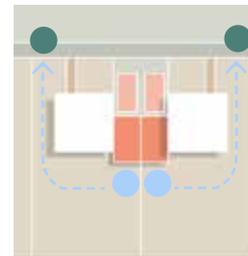


Figure 6.30 Typical service margins

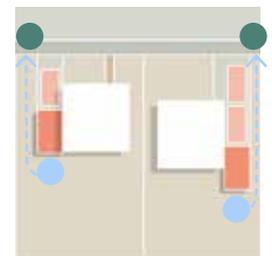
Refuse Collection

6.61 The storage and collection of household waste and materials recycling must be carefully considered in the design of blocks within the development site:

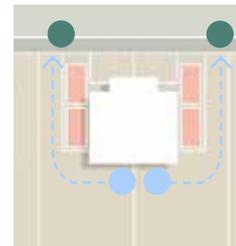
- All rubbish storage facilities should be provided at the rear of properties;
- No waste storage facilities should be provided at the front of properties, unless adequately screened. Waste storage facilities should generally be located to the rear;
- Where development includes properties such as town houses, developers will be required to source innovative solutions to effectively conceal bins from the street scene;
- Where bin stores are required for multiple dwellings, stores should be secure and visually unobtrusive and positioned to the side or rear of properties; and;
- Shared private drives inaccessible for refuse collection vehicles will require a maximum of 25m drag distance for householders to bring waste to a collection point located within extent of adoptable highway.
- Refuse management and bin storage for any non-residential uses will be set out in accordance with Secure by Design Guidance.



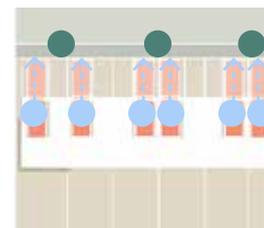
Detached Dwelling:
Storage area hidden from view to rear of property



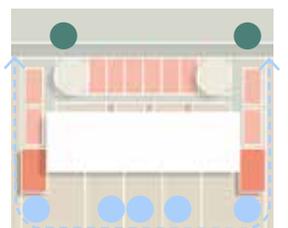
Detached Dwelling:
Storage area hidden from view to rear of property



Semi-detached Dwelling:
Storage area hidden from view to rear of property



Townhouse with integral garage:
Storage area within integral garage or hidden from view to rear of property



Terrace:
Storage area hidden from view to rear of property

Figure 6.30 Refuse storage typologies

Criteria	Residential Waste	Glass, Card, Paper, Cans, Plastic Recycling	Garden Waste
Houses	240L Maroon bin	240L Grey bin	240L Blue bin
Flats (Communal facilities for 5 units)	1100L Maroon bin	1100L Grey bin	n/a

Table 6.18 Typical refuse and recycling provision

Green infrastructure and public open space design guidance

Introduction

6.62 This chapter sets out the detailed guidance for green infrastructure and public open space provision for the East of Halewood. It establishes the guiding principles for the design of hard and soft landscape and the overarching vision for the principal areas of open space.

6.63 At the heart of the proposals is the retention of the important landscape and ecological features that contribute to the character of the site and create a structure which the open spaces and residential areas are formed.

6.64 The resulting network of connected, multi-functional open space and green infrastructure will create a defined sense of place and identity, ensuring the integration of the development into the surrounding landscape. The network of open spaces that weave through the urban area will provide a valuable amenity and recreational resource for the whole community.

6.65 The following chapter sets out design guidance for:

- Planting and habitat strategy;
 - Trees
 - Hedges
 - Shrubs
 - Meadow / grassland
 - Aquatic and marginal planting
 - Wildlife refuges
- Play & recreation;
- SuDS;
- Boundaries;
- Public art and interpretation;
- Grade II listed gravestone;
- Lighting and street furniture.

The East of Halewood development will promote healthy lifestyles and outdoor recreation for all age groups, for both residents and visitors. Finch Woods sits at the heart of the community providing the main location for the concentration of play and facilities.

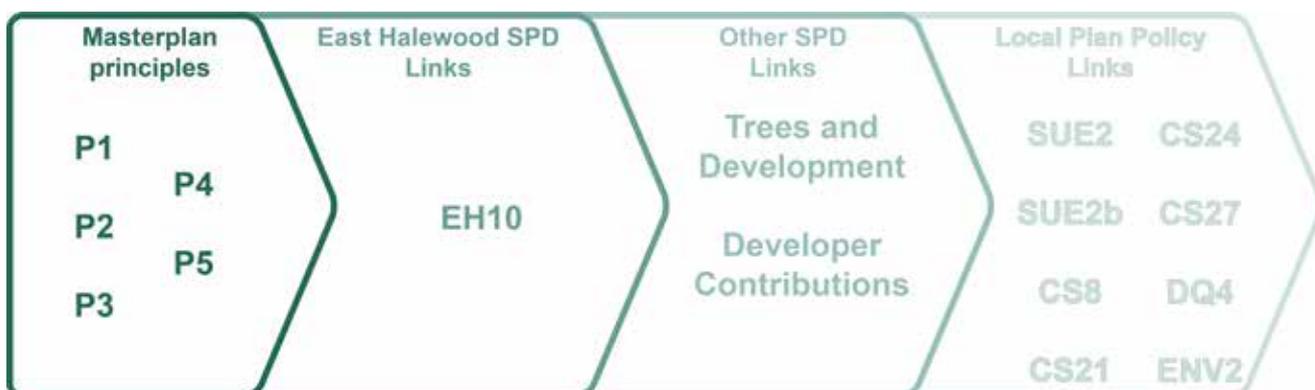


Figure 6.31 Green infrastructure - links to wider objectives and policy framework

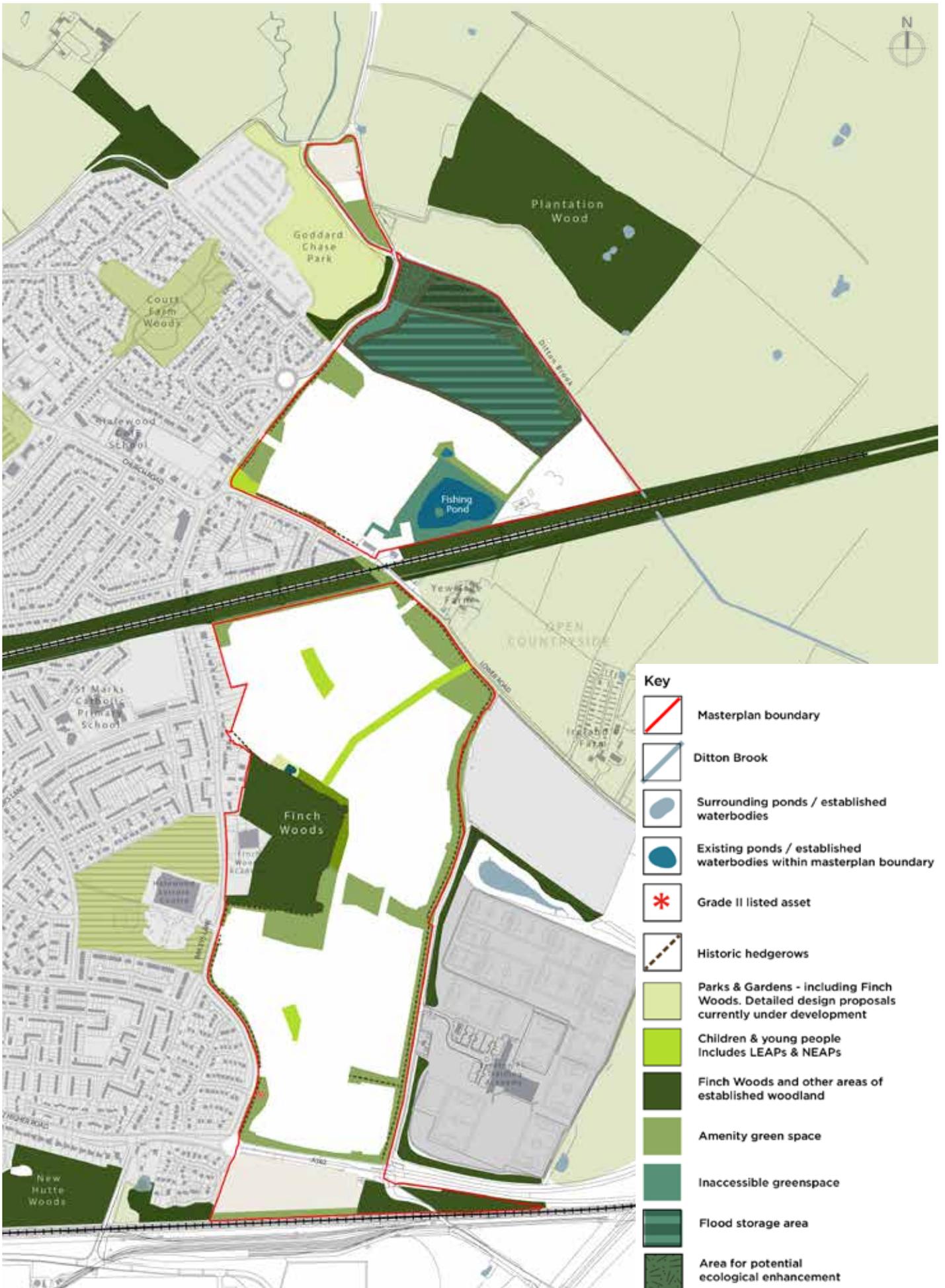


Figure 6.32 Green infrastructure strategy plan

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Planting and Habitats Strategy

Tree Specification

The tree planting palette shown adjacent sets out proposed tree species for each street typology and character area. Further detail is provided in Appendix B, which identifies a full species list to be applied within each of the character areas.

The images overleaf illustrate a selection of the proposed species within each character area. The range of species shown allows flexibility for future developers to pick from a range of planting appropriate to each of the character areas. The tree species shown have been selected with availability in mind.

The Country Edge and Plantation View palettes consist of a greater proportion of native species. The Community Core, Halewood Lanes, Woodland Edge and Higher Road approach incorporate a mix of both native and non-native tree species.

A limited palette of large trees is proposed for the Avenues and Finch Woods Park Way to create cohesion and consistency through the development. Trees proposed for lower order streets are smaller and selected from a wider palette of species. A greater proportion of fruiting trees is proposed for private gardens. A range of tree sizes and species are selected for inclusion within public open space and amenity areas.

Proposed planting sizes as follows:

Finch Woods Park Way & Avenues	20-25cm girth	min. 2.5m clear-stem
Neighbourhood Street	20-25cm girth	min. 2.5m clear-stem
Local Streets /Lanes	20-25cm girth	min. 2.5m clear-stem
Private Gardens	18-20cm girth	clear-stem / feathered
Public Open Space	20-25cm girth	min. 2.5m clear-stem

- Soil volumes to be as defined in Appendix B.
- If required soil volumes cannot be achieved within proposed planting bed, below ground structural soil cells should be utilised in accordance with typical tree pit detail (Figure 6.33);
- All tree pits to have underground guys/stakes, irrigation/aeration pipes, root directors in accordance with typical tree pit detail (Figure 6.34);
- Root barriers to be installed adjacent to below ground services;
- Base of tree pit to be free draining;
- Imported topsoil to be tested and certified to meet the requirements of BS 3882:2015;
- Incorporate slow release fertiliser into topsoil at time of planting.



Community Core



Halewood Lanes



Plantation View



Woodland Edge



Country Edge



Higher Road Approach

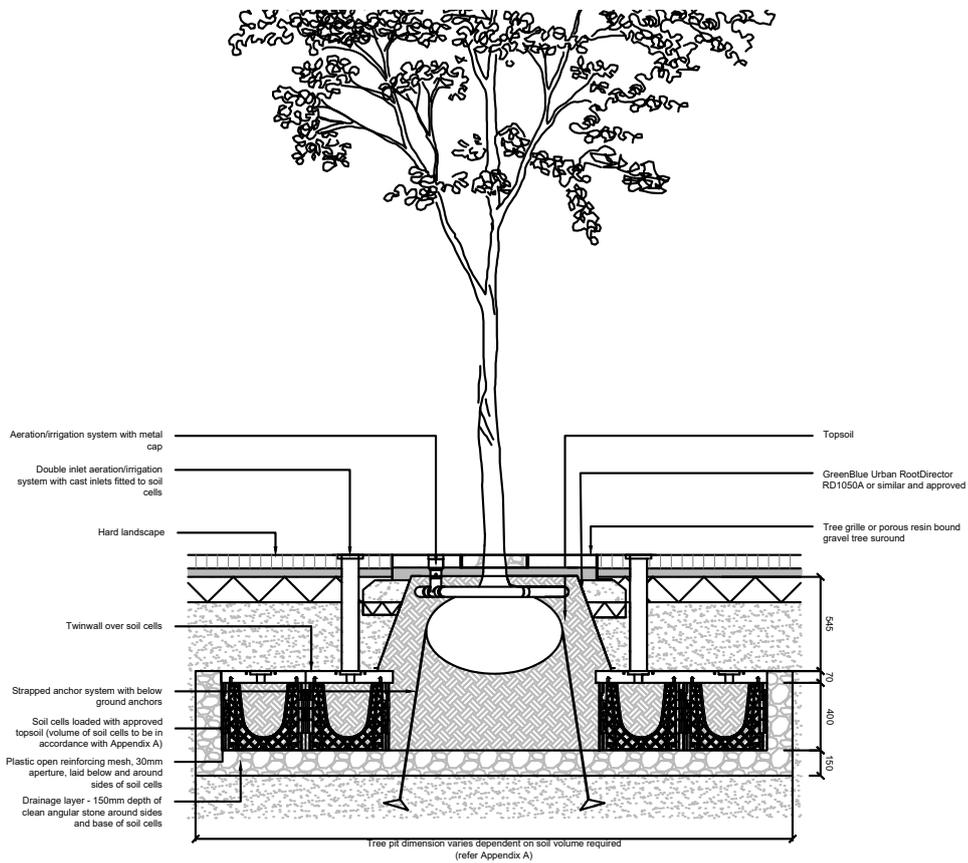


Figure 6.33 Typical detail of tree planting in areas of hard landscape

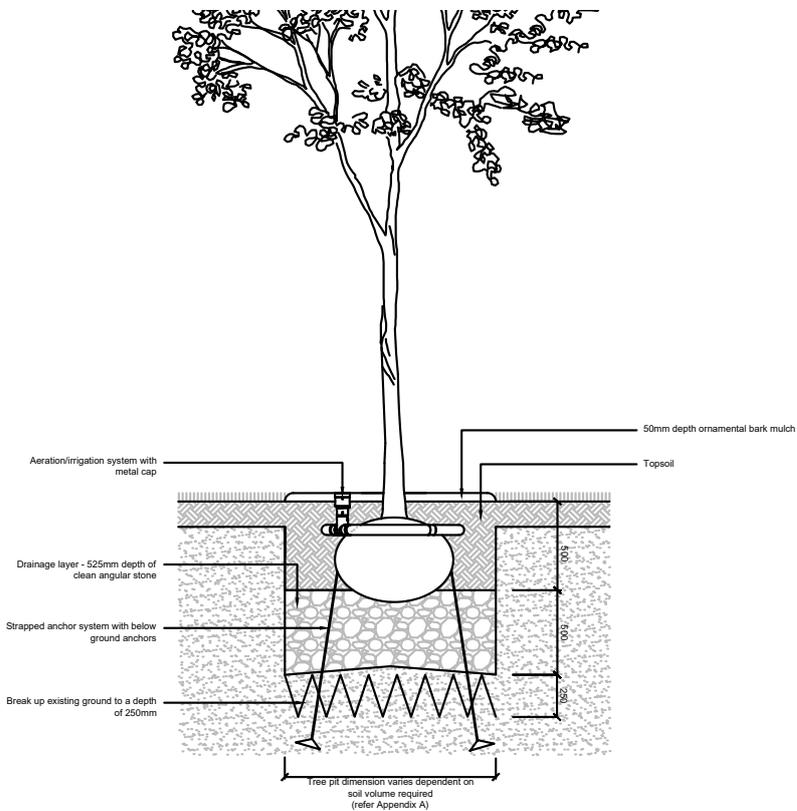


Figure 6.34 Typical detail of tree planting in areas of soft landscape

Tree Maintenance

A significant number of trees will be planted across the site. These trees must be located to allow the development of their full, natural shape and maturity. This will create a further structure and succession, a sense of place and different character areas within East of Halewood.

- Water as required during establishment period;
- Trees will be managed to enhance biodiversity of the site and ensure safety of both residents and visitors;
- Undertake formative pruning if required to maintain the health of the tree;
- Check and refirm as required during establishment period;
- Check guards, stakes and ties and remove once no longer required;
- Replace dead/dying plants during next available planting season;
- Essential tree surgery/selective felling will encourage an enhanced landscape structure and the need to encourage bird nesting and bat roosting. Where trees are removed, replacement planting with the same or similar species is to be carried out;
- Woodland areas may be subject to management, with selective thinning and coppicing to maintain a varied vegetation structure and well-developed under-storey. Control of non-native species will be encouraged and in areas low public accessibility log and brash piles will be constructed for reptile refugia and hibernacula.

Planting and Habitats Strategy

Hedge Specification

Formal hedges are proposed at the front boundaries along Local Streets, Lanes and Shared Private Drives typologies. The adjacent palette of images identifies the typical proposed species for each typology and character area. Further detail is provided in Appendix C, which identifies a full hedge species list to be applied within each of the character areas.

A diversity in species is proposed along each of the street types where hedge planting is required. Hedge species selection will help with defining the appearance of each character areas.

The Countryside Edge and Plantation View areas are intended to have a smaller palette with a higher proportion of native species.

The Community Core and Halewood Village have a wider range of species with a higher proportion of ornamental species.

The Woodland Edge area has a constrained palette of both naive and ornamental species. The Higher Road Approach character is defined by predominantly non-native, ornamental species to reflect its more urban setting.

Naturalised native hedges should be incorporated to partially enclose of areas of public open space, to reflect the agricultural history and setting of site. Consideration should be given to maintaining views and passive surveillance when proposing hedges around public open space.

Where new highways junctions are proposed around the periphery of the site, there may be a necessity to remove sections of existing field boundary hedges in order to allow for the required visibility splays. In such instances new hedgerows, with the same species or species mix, should be planted at a suitable set back from the highway, including an allowance for growth and maintenance (refer to Figure 6.31 and Figure 6.32).

- Hedges to be planted in double-staggered rows;
- All formal hedges to be rootballed or container grown, planted at min. 5/linear metre spacing;
- Field boundary/native hedge planting to be bare root stock at min. 6/linear meter spacing;
- Bare root stock to be protected with spiral tree guard;
- Imported topsoil to be tested and certified to meet the requirements of BS 3882:2015;
- Incorporate slow release fertilizer into topsoil at time of planting;
- 50min bark mulch layer to be spread after planting.



Community Core



Halewood Lanes



Plantation View



Woodland Edge



Country Edge



Higher Road Approach



Planting and Habitats Strategy

Boundary Hedges Maintenance

The site will incorporate both new formal hedges and existing native hedgerows.

- Water as required during establishment period;
- Fertilise twice annually during establishment period;
- Prune hedges as required during establishment period;
- Prune formal hedges twice annually once at the desired height;
- Prune native hedges once annually once at the desired height;
- Maintain hedge base to ensure the area is free of weeds (hand weed only in close proximity to water course);
- Remove guards, stakes and fencing once established;
- Replace dead/dying plants during next available planting season.

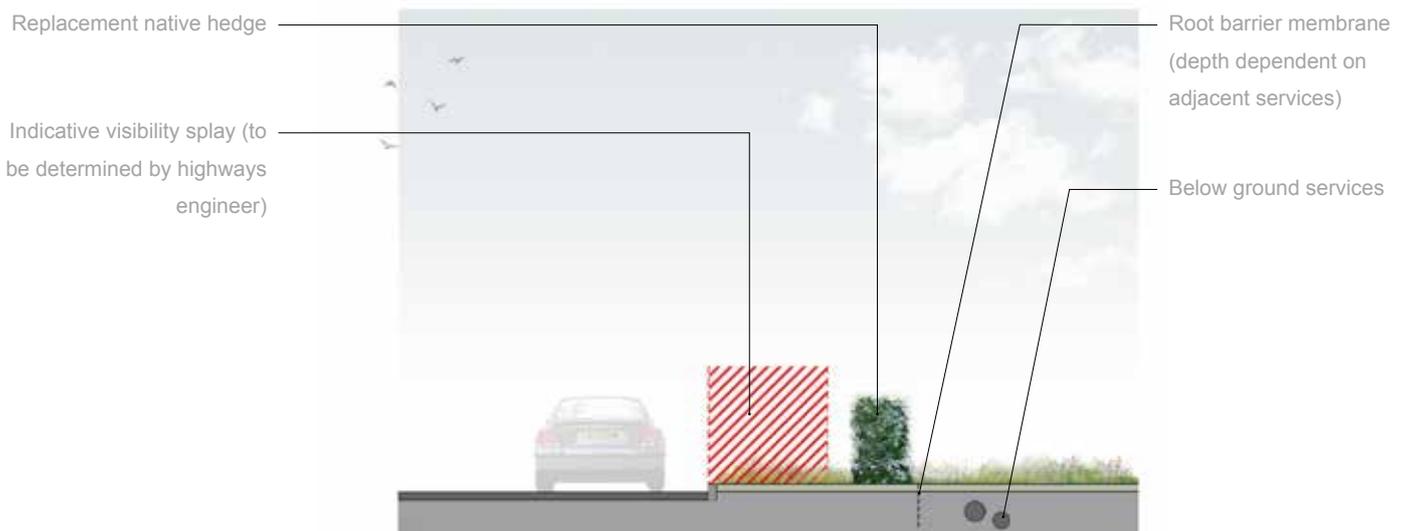


Figure 6.35 Typical replacement hedge section

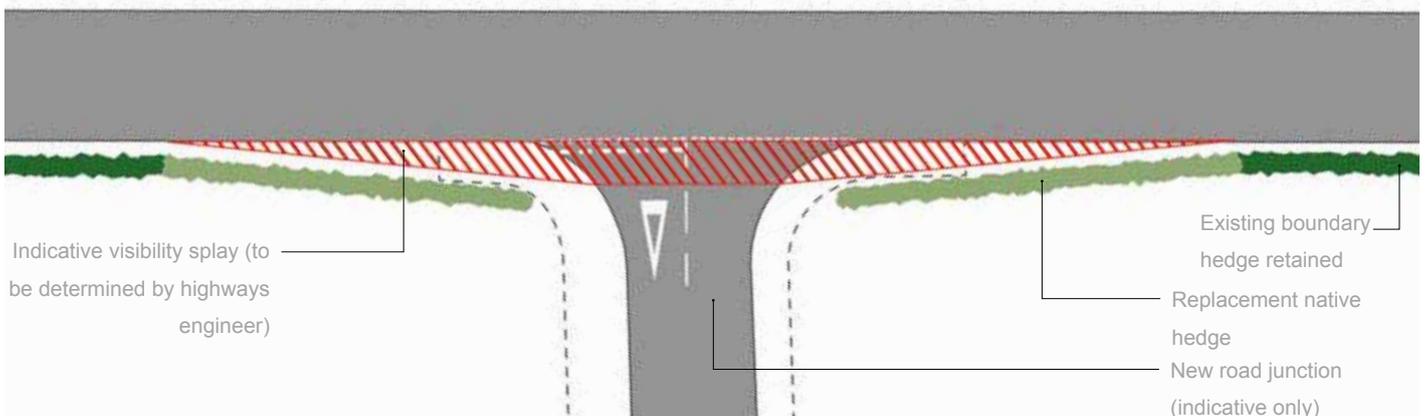


Figure 6.36 Typical replacement hedge plan

Shrubs, Perennial & Bulb Planting Specification

The following sets out a typical palette of shrubs, perennials and seasonal bulbs for each character area, split between private gardens, public open space/amenity space and verges.

Planting is chosen to be suitable for the sites location and to provide alternative for different microclimates which will exist around the development.

The proposed species provide seasonal interest, along with a proportion of evergreen foliage. Planting is intended to be attractive to wildlife, particularly invertebrate pollinators.

Planting palettes vary in appearance and in the proportion of native/non-native species across the different character areas.

Proposed verge species are shallow rooting and primarily evergreen foliage.

- All planting be container grown;
- Shrub/perennials to be 2-5L size, planted at 3-5/m²;
- Specimen shrubs to be 10-15L size;
- Imported topsoil to be tested and certified to meet the requirements of BS 3882:2015;
- Incorporate slow release fertiliser into topsoil at time of planting;
- 50min bark mulch layer to be spread after planting.



Community Core



Halewood Lanes



Plantation View



Woodland Edge



Country Edge



Higher Road Approach

Shrubs, Perennials & Ornamental Planting Maintenance

The planting strategy, specific to each character area, includes both native and ornamental planting.

- Water as required during establishment period;
- Existing areas of retained vegetation to be reviewed for management in winter, outside bird nesting season and controlled where necessary;
- Prune to keep shrubs healthy and vigorous, maintaining the shape and balance, ensuring the maximum amount of flowering wood is produced and that the shrubs do not create a nuisance or danger;
- Areas of failed planting are to be replaced in the next available planting season;
- Top up bark mulch to a depth of 50mm.

Planting and Habitats Strategy

Wildflower Meadow / Grassed Areas Specification

Wildflower meadow is proposed in a number of different locations around the site including, with public open space, SuDS basins, woodland/hedgerow boundaries and road verges.

Appendix E provides a schedule of the proposed wildflower meadow mixes aimed at encouraging pollinating insects, suitable for a variety of microclimates.

A species-rich grass mix is proposed for amenity areas of public open space.

- All meadow and grass mixes are to be sown at the supplier's recommended rate;
- The growing medium for wildflower meadow areas is to consist of a low-nutrient, sub-soil;
- Amenity grass is to be sown over a min. 150mm topsoil to be tested and certified to meet the requirements of BS 3882:2015;
- Are to be treated with suitable non-residual herbicide prior to sowing;
- Apply suitable fertiliser prior to amenity grass seeding.



Planting and Habitats Strategy

Wildflower Meadow / Grassed Areas Maintenance

Meadow:

- Cut height: 50mm;
- Where existing grassland is present, areas of bare ground will be opened up by light mechanical disturbance for sowing in a method known as 'oversowing';
- Seed mixes are to be obtained from local or regional sources and native to the soil type;
- A medium length sward will be achieved by mowing two times a year;
- Cut grass with approved rotary or flail machinery, rake and remove all arisings to designated area for disposal;
- To maintain species-richness, the meadow grass areas that have been sown with a species-rich seed mix will be mown in September. This will allow wild flowers to set seed;
- Leave arisings on site for a minimum of 4 days to allow seeds to drop;
- Maintain a min. 500mm mown grass verge adjacent to footpaths and roads.

Amenity grass:

- Cut height: maintain height of 40mm or below;
- Litter pick prior to amenity grass cut;
- Cut grass with an approved tractor drawn, ride-on or pedestrian guided cylinder mower. The Contractor shall allow for grass edge trimming;
- All arisings are to be removed;
- Spot treat for any pernicious weeds (hand weed in close proximity to water course);
- Any grass areas with naturalised bulbs, do not mow until 6 weeks after flowering;
- Apply fertiliser twice annually;
- Water as required to ensure establishment.

Planting and Habitats Strategy

Aquatic & Marginal Planting Specification

There are also a number of existing drainage ditches and ponds which are to be retained across the East Halewood site, along with new pond features. Particularly valuable for wildlife, the areas adjacent to the ditches should be enhanced to increase biodiversity.





Aquatic & Marginal Planting Maintenance

Maintain ponds and ditches to maximise biodiversity value:

- Overhanging branches to be thinned out to reduce shading;
- Cut back aquatic planting and remove arisings at the end of the growing season;
- Control invasive and undesirable species with removal, by hand pulling, of non-native species;
- Maintain any safety equipment and signage, as required.

Planting and Habitats Strategy

Wildlife refuges & Nesting Boxes Specification

Bat and bird boxes should be located sensitively across the site and the arisings from grassland and woodland management; branches, grass cuttings and logs will be used for the construction of reptile refuges and hibernacula. The following should be installed in appropriate locations across the site:

Bat Bricks or Boxes

Integrated enclosed bat bricks

Location: proposed dwellings

Colour: to match dwelling brickwork

Dimensions: 215 x 290mm

Building mounted bat boxes

Location: proposed dwellings

Material: Woodcrete

Dimensions: 390 x 290mm

Tree mounted bat box

Location: existing mature trees

Material: Woodcrete

Dimensions: 330 x 160mm

Bird Boxes

Open hole nest box

Location: existing mature trees

Material: Woodcrete

Dimensions: 230 x 160mm (26mm hole)

Open fronted nest box

Location: existing mature trees

Material: Woodcrete

Dimensions: 200 x 150 x 200mm

MEAS will be consulted regarding the location of bird and bat boxes through the planning application process.



Wildlife refuges & Nesting Boxes Maintenance

- All habitats should be subject to annual monitoring and inspection, with replacement of broken or damaged boxes or repairs as required.

Play & recreation guidance

6.66 Alongside informal green space, the masterplan designates play areas (as illustrated on the adjacent Play and Recreation Strategy Plan), in accordance with the following guidelines:

NEAP (Neighbourhood Equipped Area of Play)

- This space will be defined by a synthetic surface material that also accounts for relevant critical fall heights using rubber crumb;
- The material for play equipment / play structures should generally be galvanised steel construction, including options such as climbing frames, see-saws, swings and slides;
- The environment should provide stimulating and challenging 'natural' play opportunities for both older and younger children;
- The space should be designed to attract older children to play independently within a 15 minute walk from home;
- There must be an adequate quantity of play space (minimum 1000m²) and quantity of equipment (suggest a minimum 9 different play experiences) for all children who live within a 1km radius;
- The NEAP must be positioned by a pedestrian route that is well used, must be overlooked by neighbouring homes for natural surveillance, but be a minimum of 30m offset between the activity zone and the nearest property boundary;
- Convenient and secure parking facilities for bicycles should also be provided;
- Boundaries should be recognisable by formal fencing features such as galvanised steel bowtop fence or similar.



NEAP (Neighbourhood Equipped Area of Play)

Play & recreation guidance

LEAP (Local Equipped Area of Play)

- Primarily designed for unsupervised play of age ranges 4-12;
- Defined by a naturalistic surface treatment such as bark mulch or turf to promote a sense of openness through soft outdoor play;
- The material for play equipment should generally be galvanised steel construction;
- These areas should consider healthy play through a trim trail design or naturalistic features such as boulders, felled trees, tree stumps, willow walkways and grass mounds;
- These areas must provide stimulating and challenging 'natural' play opportunities with a recommended minimum of 6 play experiences for all children who are beginning to go out and play independently;
- There must be an adequate quantity of play space (minimum 400m²) and must serve a catchment area within a 400m radius;
- LEAPs must be positioned by a pedestrian route that is well used, must be overlooked by neighbouring homes for natural surveillance, but allow for a minimum of 10m between the activity zone and the boundary of the nearest property and be a minimum of 20m from an adjacent habitable room facade;
- Boundaries should be recognisable by designed landscape elements;
- Timber equipment should be guaranteed for at least 15 years.



LEAP (Local Equipped Area of Play)



LAP (Local Area of Play)

- This Space will be defined by a naturalistic surface treatment such as bark mulch or turf to promote a sense of openness through soft outdoor play;
- These areas should consider healthy play through play elements such as trim trails;
- These areas must provide stimulating and challenging 'natural' play opportunities for younger children;
- There must be an adequate quantity of play space (minimum 100m²);
- LAPs must be positioned by a pedestrian route that is well used, must be overlooked by neighbouring homes for natural surveillance, but be a minimum of 5m from the nearest dwelling;
- Boundaries should be recognisable by designed landscape elements;
- Timber equipment should be guaranteed for at least 15 years.



LAP (Local Area of Play)



Examples of Natural Play Features

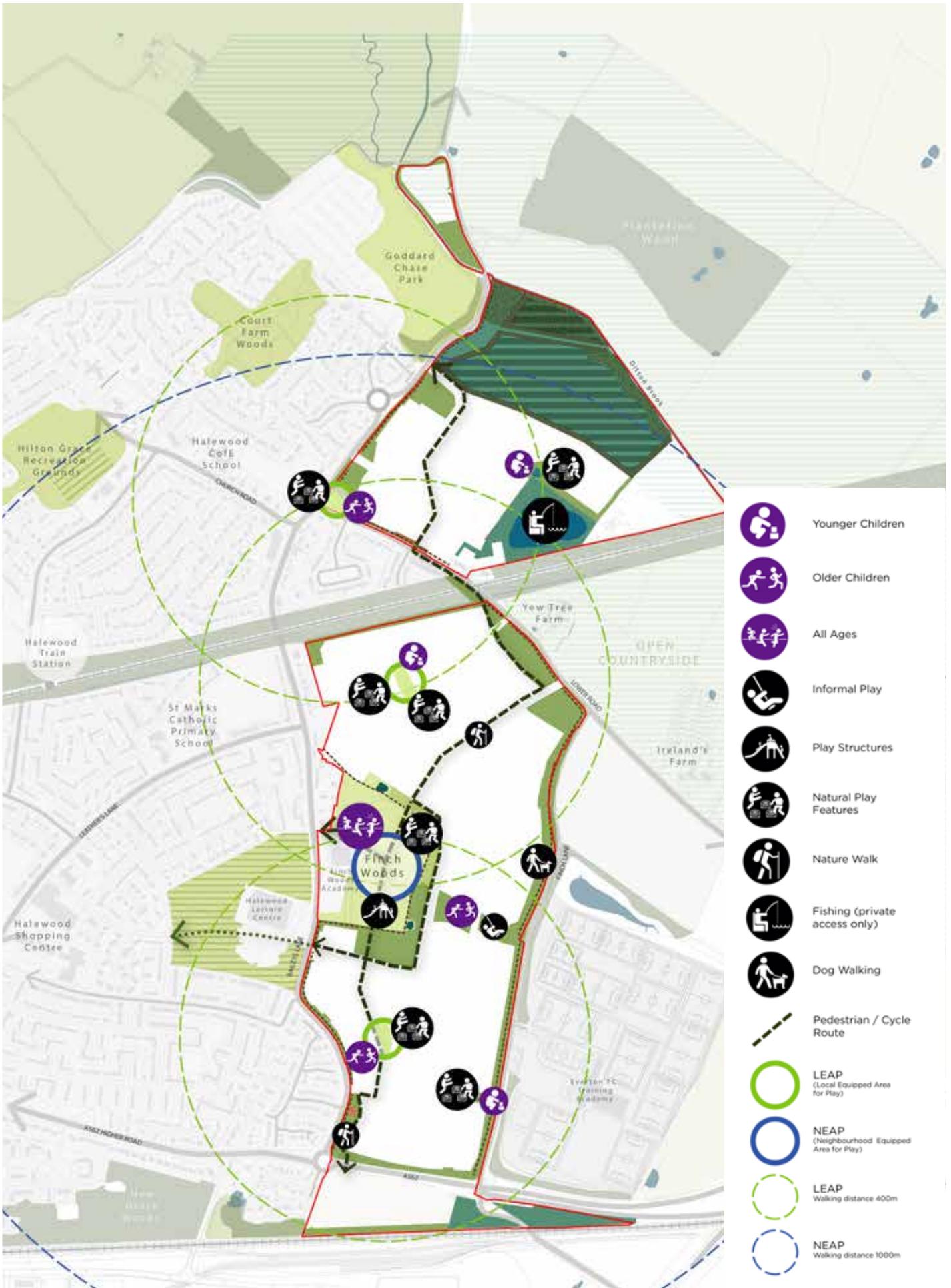


Figure 6.37 Play and recreation strategy plan

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SuDS Guidance

6.67 Public realm, open spaces and urban landscapes can be designed to channel, treat and store water locally, using passive treatment systems that embed their ecological value. The proposed development East of Halewood presents an opportunity to manage surface water and drainage in a sustainable, and ecologically beneficial way. This can create a variety of landscape features throughout the site that are functional, as well as attractive, while providing a model development in the implementation of SuDS in the area.

6.68 All SuDS features intercept rainfall increasing the lag time to its discharge into river systems. They all play an important role, not only in interception of rainfall but in what they offer in enhancement of streetscape and public open space.

6.69 SuDS features must ensure they adhere to the Environment Agency’s ‘Approach to Groundwater Protection’. Any drainage schemes (surface and foul water) which sit within the Source Protection Area will need to be of a higher design quality than standard.

6.70 The approach to SuDS and water management across the site could incorporate the following components:

SuDS Component	Site Location				On-plot Driveways
	Public Open Space	Avenues	Neighbourhood Streets	Local Streets / Lanes	
Detention Basin	☐	X	X	X	X
Wetlands & Ponds	☐	X	X	X	X
Swales	☐	☐	X	X	X
Rain Gardens	X	X	☐	☐	X

Table 6.19 SuDS components

Detention Basins

6.71 Detention basins are open areas of soft landscape that are normally dry, except after major storm events. In heavy rainfall they are used to store water for a short time. They have many wider benefits, aside from just managing water, especially when they are planted with suitable and interesting plant species. For example, they can provide opportunities for ecological habitat creation.

6.72 Source control measures located upstream that inhibit silt and pollution entering into the basin, as well as reducing the amount of surface water runoff reaching the basin, must be implemented so as to maximise their effectiveness. Doing this means that forebays (upstream sediment traps) and substantial erosion control may not be needed, therefore facilitating better integration into the landscape and a reduction in maintenance requirements.

6.73 They are simple to design and construct and easy to maintain. Depth (and volumes) are dependent on available inlet and outlet invert levels.

- Silt must be intercepted at source and wherever possible the basin must support routine maintenance to limit silt build up;
- The flow of surface water runoff into the basin must be from upstream source control features, if this is not the case, an erosion control structure will be needed to manage the flow;
- The basin must have a minimum of 3:1 to 5:1 length to width ratio, and side slopes varied with an absolute maximum gradient of 1:3, but a preferred maximum of 1:6 for safety reasons;
- Detention basins must have an overflow. Overflows/connections to existing retained water features should only be provided where required;
- A bed slope of approximately 1:100 to the outlet must be provided;
- Slopes may be reduced where habitat space or wetland space is required;
- A controlled outlet must be provided from each detention basin along with a retained depth of water (micro-pool) below the basin outlet level;
- Basins must be integrated into the landscape design to provide associated benefits and to encourage informal policing by the local neighbourhood;
- A grassed area must be incorporated around the detention basin;
- Areas for recreation and amenity must be at a higher level than the low flow water level;
- Access points, paths and verges are to be regularly mown;
- Basins can be on-line, or off-line where a flow diverter will be needed to store large volumes of surface water runoff;
- For safety reasons, surface water storage depths must not exceed 600mm in residential areas, unless appropriate mitigations can be provided;
- To maintain the character and ecology of existing retained water features (e.g. Finch Woods Pond) detention basins must be separated hydraulically from existing water features. Detention basins must collect surface water runoff from the proposed development only; the one exception being the interception of exceedance flows over and above the capacity of existing water features.

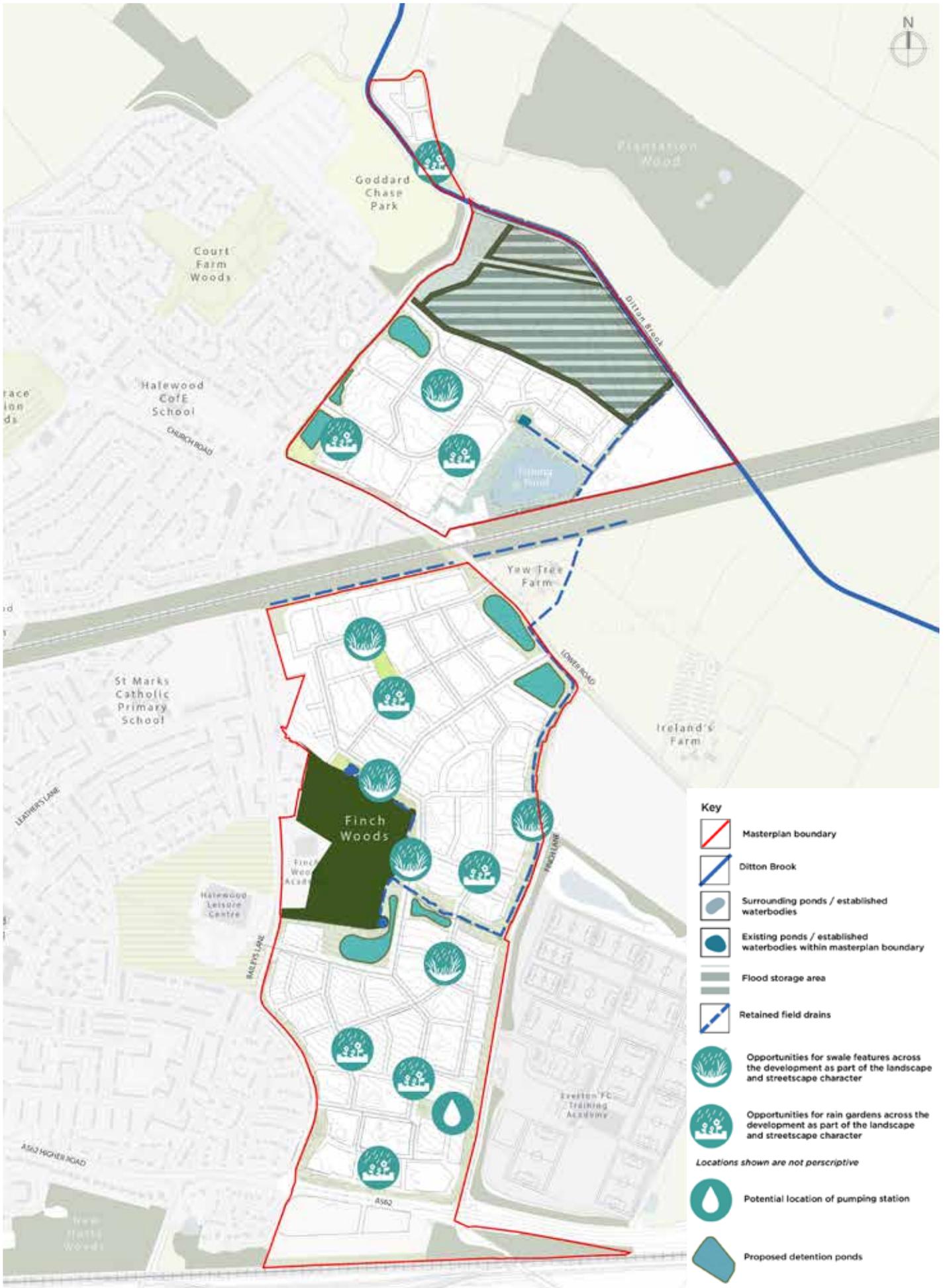


Figure 6.38 SuDS strategy plan

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Wetlands & Ponds

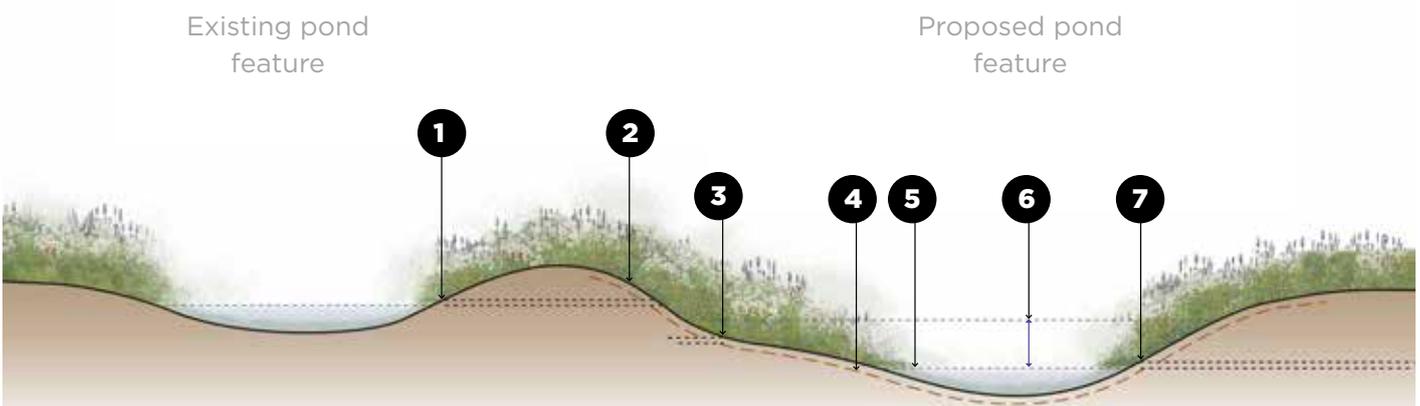
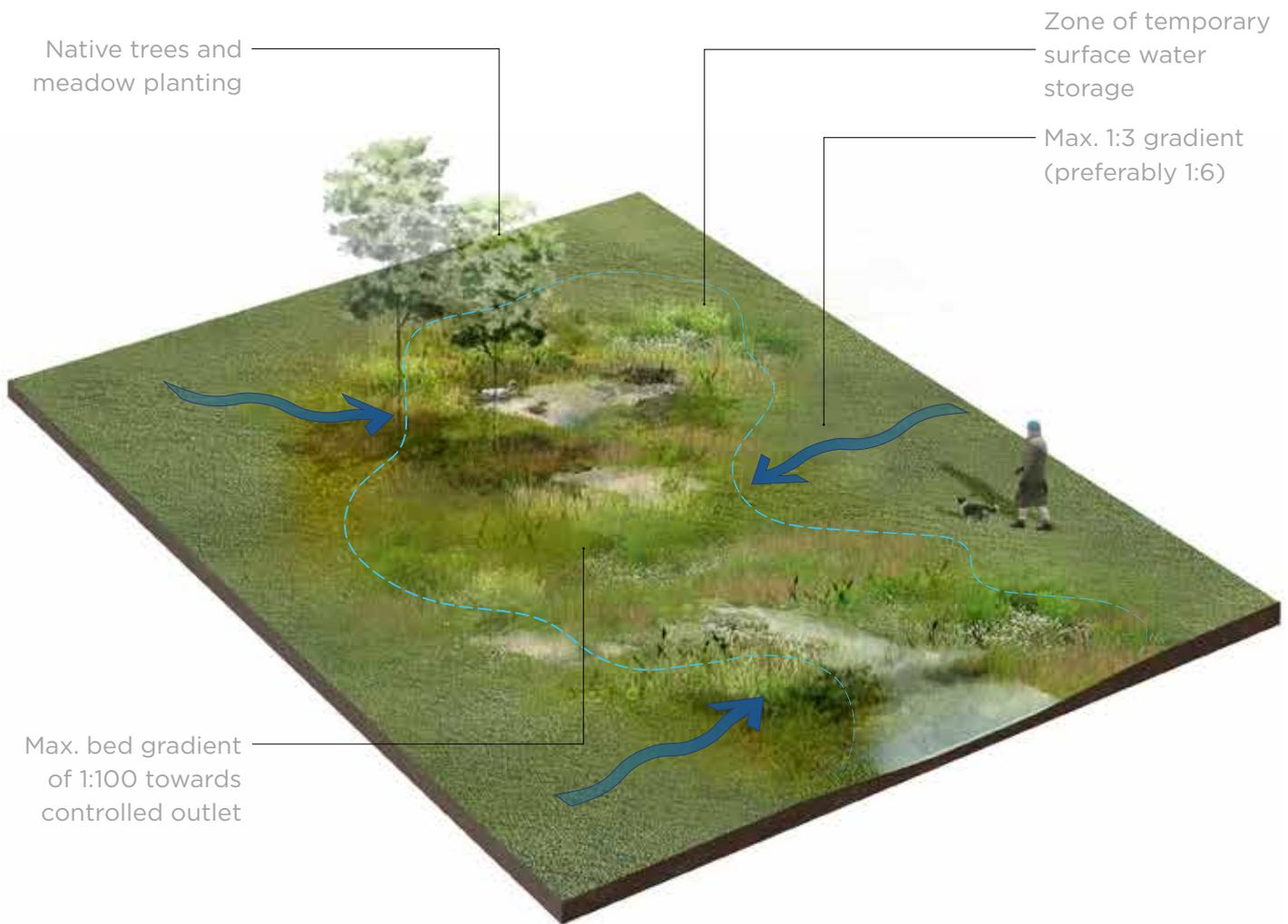
6.74 If wetlands and ponds are proposed they should be designed in response to the following guidance.

6.75 Ponds and wetlands are open areas of shallow water, designed so they can accommodate rainfall and provide temporary storage for excess water. The water level rises temporarily when it rains, but there is always a permanent pool of water. Ponds have a good removal capability for urban pollutants and high potential for ecological, aesthetic, amenity and community benefits and may add value to properties.

6.76 To increase the effectiveness of the wetlands in the development, a number of small ponds which will hold permanent or semi-permanent volumes of water may be incorporated in the wetland system. This will provide more effective treatment of soluble pollutants and offer significant amenity and ecological value.

6.77 Effectively designed wetlands and ponds should only receive silt-free surface water runoff, however, with the addition of ponds in the wetland, slightly polluted runoff can be managed due to the ability of micro-organisms within the deeper water to process this pollution.

- Wetlands and ponds must mimic natural elements and processes wherever possible;
- The wetland and pond system must be designed to clean, store and convey surface water runoff to the next part of the management train;
- The system must be designed to retain and treat surface water runoff from a defined area of impermeable, hard surfaces;
- A sediment forebay must be included to intercept silt but this is unnecessary if source control features are in place further upstream;
- There must be a continuous baseflow into the system;
- There must be a dry bench with a minimum width of 1m, to allow people to stand safely before descending towards the more accessible areas of the system, which will also enable easier maintenance. These will be grass or hardstanding;
- Boardwalks with balustrades should be incorporated to allow safe access alongside the waters edge;
- A variation in depth is recommended for treatment and ecological reasons but water depths must not exceed 600mm;
- Side slopes varied with an absolute maximum gradient of 1:3, but a preferred maximum gradient of 1:6, both for safety reasons and ease of access/maintenance;
- Liners may be required to retain a permanent volume of water;
- The wetland and pond system must be located at the end of the management train to ensure that clean water and controlled flows enter it;
- Inlets and outlets must be placed to maximise the flow path through the system, assisted by its shape, islands and baffles, if necessary;



1. Potential overflow / connection between existing and proposed pond (with debris screen if required)
2. Side slopes varied with a max gradient of 1:3 (preferred 1:6)
3. Controlled inlet from development
4. Geotextile / clay liner (if required) to maintain hydraulic separation between features
5. Permanent depth of water below outlet (to meet ecological specification)
6. Storage depth - maximum of 600mm plus 300mm freeboard allowance
7. Controlled outlet from development (with debris screen if required)

Figure 6.39 Detention Basin Axonometric View and Section

- The outlet invert will be at the permanent water level of the system;
- A number of smaller pond features in a linked wetland chain will fit more easily into the development, and will allow simple access for maintenance and provide wider biodiversity benefit;
- Water must flow into the system in a controlled way via a robust, simple and easily maintained control structure to limit flows into the pond unless all flows have been controlled further up the management train;
- The system requires an overflow to allow for design exceedance or outlet blockage.
- Swales must be shallow with side slopes with an absolute maximum gradient of 1:3 but a preferred 1:6 gradient, to allow flow across the edge, easy maintenance and safe access;
- Swale depth must typically not exceed 450mm;
- A 100-150mm depth should be allowed for normal flows using vegetation to reduce flows and facilitate filtration;
- A maximum 300mm depth of storage above normal flow depth should be allowed for, and a freeboard if considered necessary, to provide an acceptable swale profile;
- Flow rates through the swale must be restricted to a velocity of 1-2 m/s or a maximum longitudinal slope of 1:50 to prevent erosion and ensure effective pollution control;
- Slopes along the swale of less than a 1:100 gradient can increase permanent wetness depending on soil conditions and should be avoided;
- Swale base width must be between 1m and 2m to allow effective maintenance and prevent gulying of the base;
- Boardwalks should be provided to allow pedestrian access across swales adjacent to area of public open space.

Swales

6.78 Swales are linear channels with a flat base that encourage sheet flow of water through suitable planting. They are usually broad and shallow and covered by vegetation to slow the water, facilitating sedimentation, filtration, evaporation and infiltration. Swales are used to collect, transport and store surface water runoff.

6.79 They can replace conventional pipework, enhance the landscape and provide aesthetic and biodiversity benefits.

- Swales usually collect surface water runoff laterally;
- Erosion control and silt collection arrangements will be needed;
- During storm events and heavy rainfall, when the infiltration capacity of the swale has been exceeded, these systems will deposit overflow water into the next drainage feature in the SuDS management train;

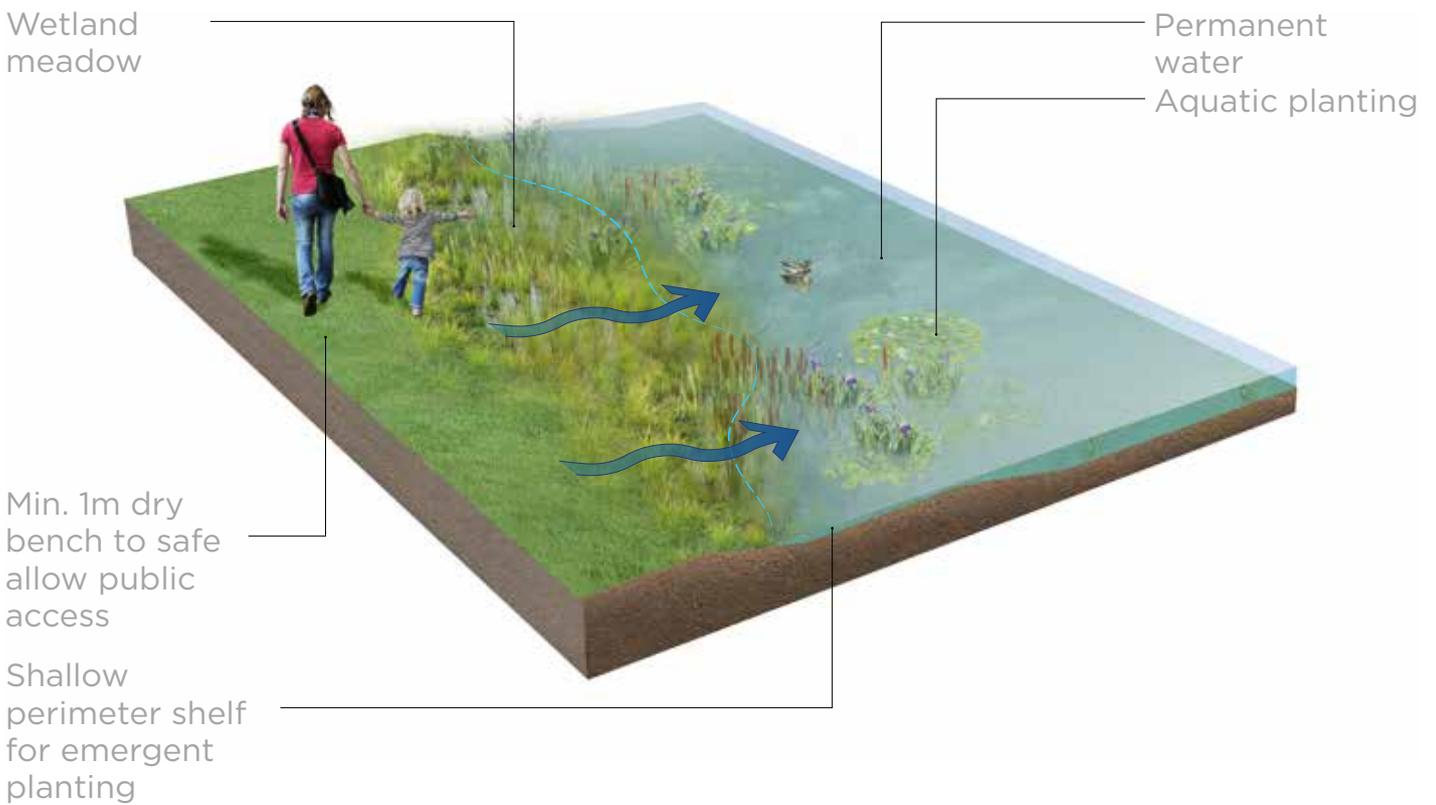


Figure 6.40 Wetlands Axonometric View



Figure 6.41 Swale Axonometric View

Rain Gardens

6.80 Rain gardens are shallow landscaped depressions that can reduce runoff rates and volumes and treat pollution through the use of engineered soil and vegetation. Rain gardens should have a maximum depth of standing water of 150mm with either above ground over flows or underdrains. Rain gardens can offer a variety of creative designs to suit the site conditions:

- Maximum recommended draining area to one system is 0.8ha.;
- Inflow velocities should be considered and erosion protection measures put in place as required;
- Larger sites can be divided into smaller linked zones;
- The area of the rain garden system should be 2-4% of the overall site area to be drained;
- Bioretention areas should be designed for intermittent flows and be able to re-aerate between rainfall events;
- Systems with an underdrain should include maintenance/cleaning access to the drain;
- Width should be greater than 600mm and less than 20m (or 10m if access is restricted). The maximum length should be 40m and the total filter area should not exceed 800m². In practice, systems will be much smaller and integrated into the landscape as small local features;
- Check dams can be used along the system to reduce velocities;
- Sufficient depth should be provided to contain the treatment volume (normally 150-300mm);



Figure 6.42 Rain Garden Axonometric View



Wetlands



Rain Garden



Swale



Swale



Detention Basin



Detention Basin

SuDS Maintenance

Maintain swales and detention basins on a regular basis to ensure they continue to perform their function within the site-wide SuDS strategy.

- Litter pick and remove debris from site;
- Cut amenity and meadow grass, as described previously;
- Manage wetland planting to ensure no single species becomes dominant;
- Remove weeds, dead growth and invasive species, as required;
- When maintaining ditches and wetlands, leave arisings on embankments overnight to ensure any wildlife returns to the watercourse;
- Inspect and clear inlets, outlets and overflows.

Key Site Boundaries

Hesketh Land Parcel

6.81 The development of the Hesketh land parcel should include for a setback along its southern boundary in response to the West Coast Mainline railway corridor and adjacent Jaguar Land Rover plant. The exact scale and distance of the setback required will be determined through further detailed acoustic surveys accompanying future planning applications. The setback is required to provide some of the following mitigation responses:

- Provide noise buffer (to be confirmed pending further detailed noise assessments) to West Coast Mainline railway corridor and adjacent Jaguar Land Rover plant;
- Utilise landform;
- Incorporate acoustic barrier fencing only where necessary;
- Use planting to create a green screen against acoustic barrier;
- Sculpt landscape to add to character of adjacent public open space; and
- Orientate development to overlook public open space.

Finch Lane Boundary

6.82 The eastern boundary of the site, parallel to Finch Lane, should be developed sensitively to make the most of the setting and the existing landscape features. The space should:

- Maintain and enhance existing field boundary hedgerows;
- Improve species diversity and habitat value with native wildflower meadow and native tree planting;
- Incorporate a pedestrian route within the new linear public open space;
- Orientate adjacent development and streets to provide passive surveillance and lighting to the pedestrian route;
- Provide sensitive approach to neighbouring uses at Finch Farm Everton Training Academy and;
- Ensure utility easements are sensitively integrated into landscape and built form.



Sculptural landform/bund around public open space



Sculptural landform/bund around public open space



Native hedgerow border wildflowers



Pedestrian/cycle path alongside existing hedgerow

Public Art & Interpretation

6.83 The approach to public art and interpretation must be strategic and coordinated, and must consider the site as a whole. It should take a range of forms and be co-ordinated with the play and recreation, wayfinding and signage and site-wide movement strategies.

6.84 Proposals should consider the following:

- Art should be integrated within public open space and the public realm, including paving, street furniture and play equipment;
- Rather than standalone pieces, a sculpture art and interpretation trail should be proposed, in particular along the pedestrian and cycle network;
- Areas of the site lend itself to using lighting as a form of public art, particularly beneath the proposed new railway arch connection and within Finch Woods;
- Along with sculptures and art installations, sculpted landform should be incorporated in suitable locations, such as along the southern boundary of the site and within the Flood Storage Area to the north;
- The history of the site, in particular the story of Blackie the Warhorse, should be incorporated and celebrated within the theming of public art and interpretation. The proposed location of an interpretative piece of public art is within Finch Woods;
- Interpretation boards should be incorporated in to walking routes to promote an understanding of local habitats and wildlife to foster a sense of ownership amongst residents in their surrounding environment;
- The role of SuDS features around the site could be explained through the use of appropriately located information boards.

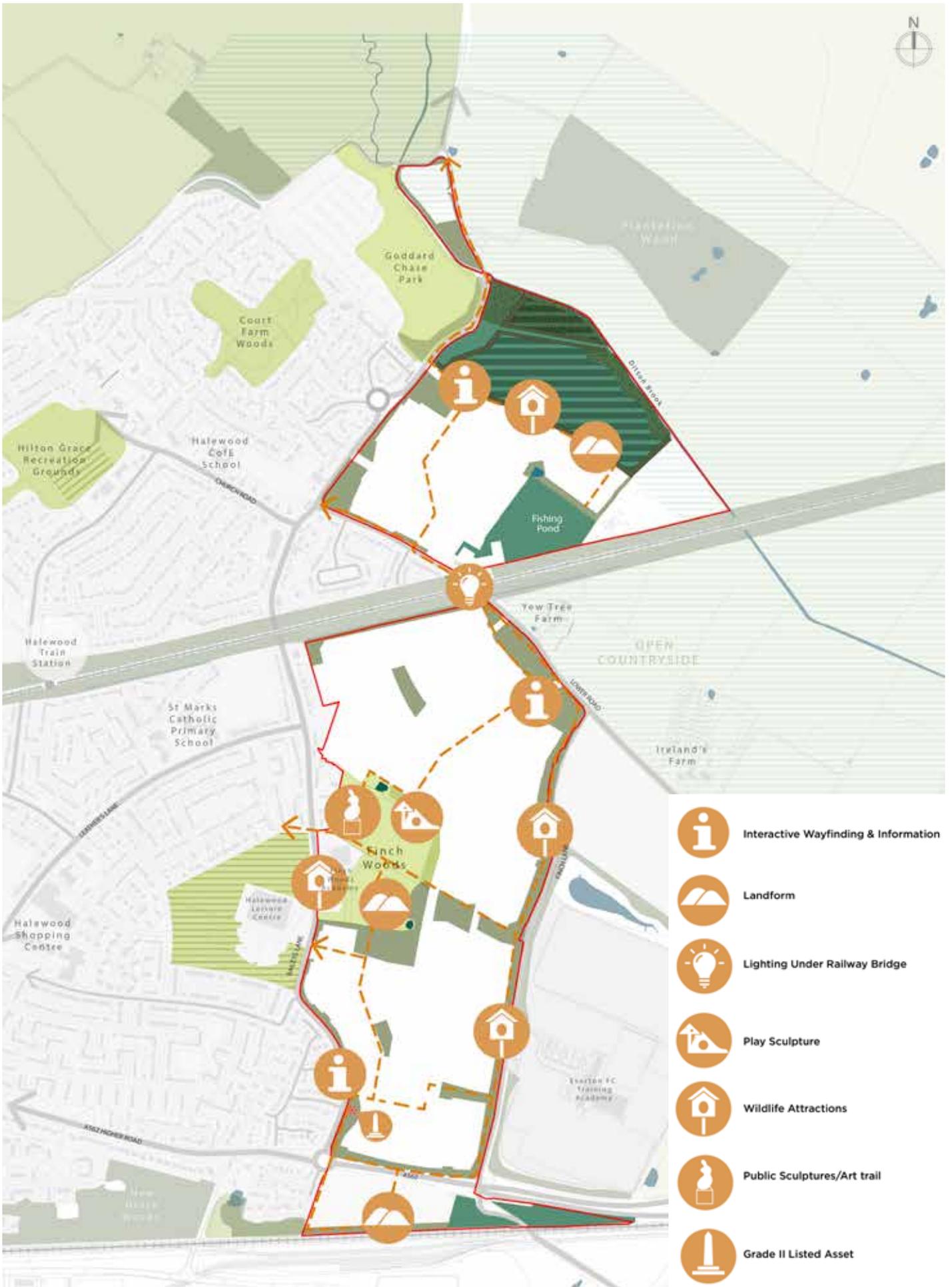


Figure 6.43 Public art and interpretation strategy plan

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Public Art & Interpretation



Lighting art to railway viaduct



Interpretation within seating elements



Art and interpretation integrated into with paving



Art and interpretation integrated into landscape structures



Sculpted land-form



Sculptural installation reflecting site & cultural heritage





Figure 6.44 Axonometric of Blackie's Memorial Public Art



Figure 6.45 Photomontage of Blackie's Memorial Public Art

Wayfinding & Signage

6.85 The approach to wayfinding and signage should be appropriate to the nature and scale of the development. It should ensure legibility and ease of navigation for visitors without creating unnecessary additional street furniture and clutter within the public realm. Street naming provides an opportunity to respond to local history and site features.

6.86 Wayfinding and signage elements should be in accordance with the following guidance:

- Signage should provide clear direction to features of interest and local facilities, both within, around and beyond the East of Halewood development;
- Key walking, cycling, nature and public art trails should be identified, within and around the development;
- Wayfinding should highlight strategic shared pedestrian/cycle routes;
- Signage should be limited to key nodes within open space and the public realm to aid wayfinding for visitors without creating unnecessary clutter;
- Signage and wayfinding elements should be coordinated with a site-wide palette of street furniture and be easily maintained or replaced;
- Visual appearance to be aligned with the Council's branding strategy for East of Halewood.





Figure 6.46 Wayfinding strategy plan

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Grade II Listed Gravestone

6.87 Future development has an opportunity to create an enhanced setting created around the grave of Blackie the Warhorse. The Grade II listed gravestone is to be retained and incorporated within a key area of public open space within the East of Halewood development.

6.88 The area around the listed grave should create a respectful setting, which utilises the existing landform and natural site features and which enhances the setting of the listed asset.

6.89 The newly created usable public space around the listed asset and the asset itself can become part of a wider network of key spaces and places (further details on these are provided in chapter 06G), linked by the dedicated pedestrian and cycle link.

6.90 The adjacent plan illustrates the following guidance:

- The development limit should be appropriately set back from the listed asset to preserve its setting. The minimum setback required is 27m from grave to the edge of the proposed dedicated cycle route;
- The existing pasture land environment adds to the significance of the listed gravestone, as the field and hedges are much as they would have been when Blackie was buried in a quiet corner of the field; The retention of a “pasture land” environment to the south of the grave towards Higher Road, would therefore sustain the contribution made by the asset’s historic setting;
- The grave should be set within a wider area of usable public open space, which should provide a suitable arrival space into the development from Baileys Lane;

- The adjacent street network should be aligned to relate positively to the listed gravestone;
- The grave should be accessible without steps, addressing the existing site levels constraints;
- The design should allow appropriate space for formal ceremonies, including an area of mown lawn in front of the grave itself;
- Where possible, existing hedgerows and trees should be retained;
- Proposals should include native trees and wildflower meadow, as well as areas of mown grass;
- Interpretation should be provided to tell the story of Blackie the warhorse and the significance of the listed gravestone.

6.91 As well as the guidance set out above, there is an opportunity to establish a series of responsive place-making responses including;

- Development setback from Avenue Street access points, overlooking arrival greenspace from Baileys Lane;
- Prominent buildings stand out amongst a prominent building frontage that addresses Baileys Lane;
- Dedicated pedestrian and cycle route provides a recreational link between the Grade II Listed gravestone and Finch Woods;
- New approach views created along Baileys Lane and Higher Road, creating a new high quality townscape address to existing roads. The roofs of buildings become visible behind existing hedgerows or fully visible to Baileys Lane.

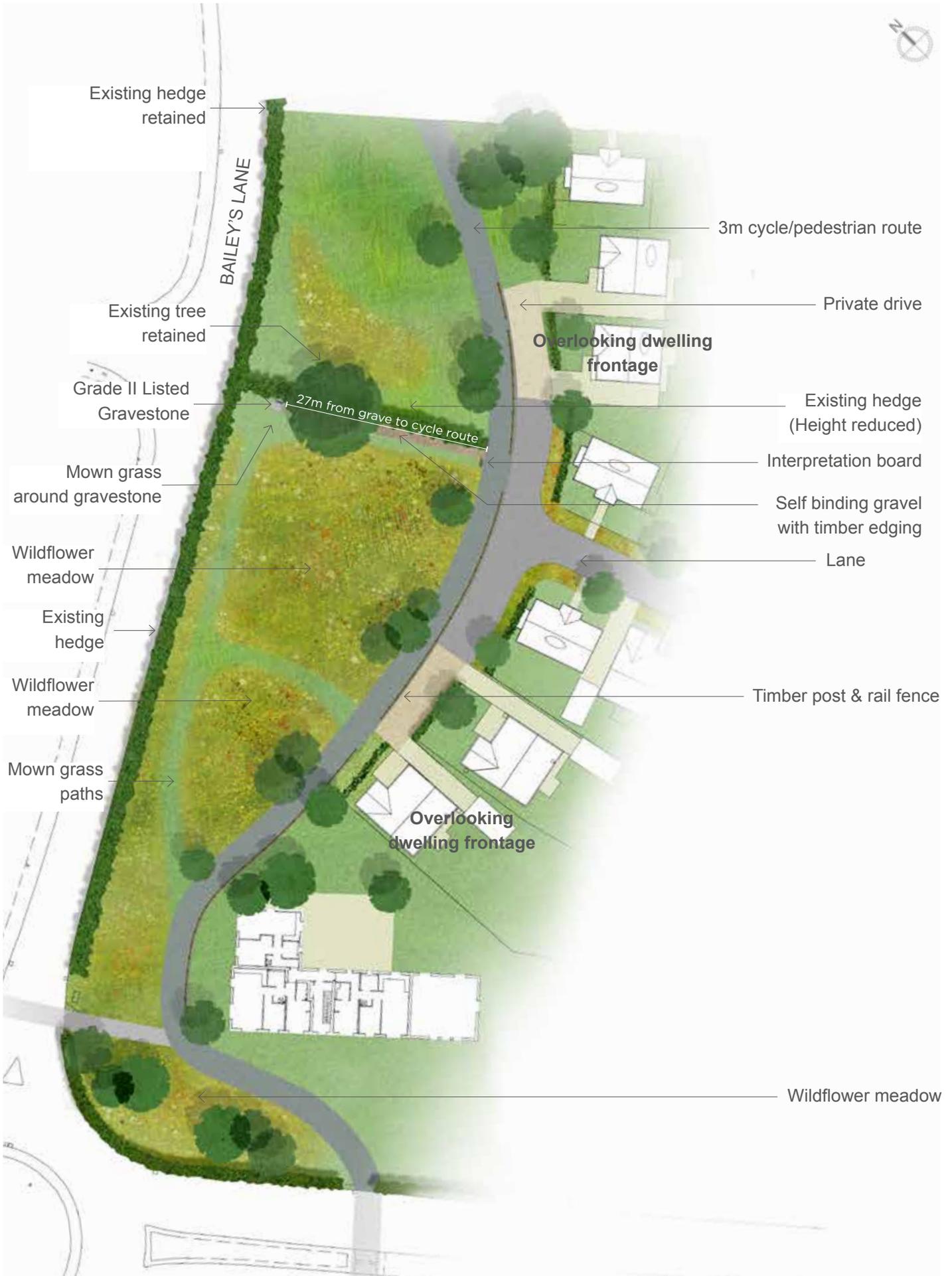


Figure 6.47 Illustrative plan of public open space around grade II listed gravestone

Street Furniture & Lighting

6.92 Detailed design proposals for the site should incorporate a coordinated, site-wide, palette of street furniture and lighting. Street furniture and lighting elements should be robust, maintainable and replaceable, and should be in accordance with KMBC's standard specification.

6.93 Street furniture and play equipment should incorporate site-side development branding and logos.

6.94 All external lighting should be designed to avoid light pollution.

6.95 Services street furniture should be aligned parallel to the street to avoid creating obstacles or clutter and be coloured black, consistent with other street furniture.

6.96 The proposed street furniture palette is illustrated overleaf.



Litter Bins

Product: Gladston Jubilee

Dimensions: H 1158 x W 598 x D 553mm (110L)

Materials: Durapol® polymer / polyethylene

Colour: Black RAL9005

Additional features: Recycling variant / East of Halewood Logo



Benches

Product: Streetmaster 1800 Grafton

Dimensions: L 1800mm (80 x 40 x 3mm)

Materials: Cast Iron / steel

Colour: Black RAL9005

Additional features: Arm rests / East of Halewood Logo



Cycle Stands

Product: Broxap Sheffield Cycle Stand

Dimensions: W 715 x H 800 x 48.3mm dia.

Materials: Stainless steel

Additional features: Root fixed / 800mm spacing



Street Lighting

Manufacturers: Selected from the following KMBC approved manufacturers

Fabrikat

Abacus Lighting Limited

Colour: Black RAL9005

Development sustainability

6.97 Sustainability credentials should be capitalised upon across the whole of the site and also at the micro scale, with consideration given to design and construction quality, energy conservation, renewable energy use and mitigation against environmental impacts.

6.98 The strategic Sustainability Framework (Figure 6.49) identifies opportunities to capitalise upon the scale, characteristics and quality of the site to bring about significant community/social cohesion and environmental performance. Both environmental and community sustainability opportunities are prevalent across the site, given its context and proposed mitigation proposals, which are embedded into the strategic masterplanning of the site. These sustainability credentials are underpinned by the East of Halewood SPD, through the vision and six masterplan objectives.

6.99 Policies in the adopted development plan (in particular Core Strategy Policy CS22) set out design and development standards to support sustainability objectives including promotion of low carbon development, and renewable and low carbon infrastructure.

6.100 Future applications must demonstrate through an energy/sustainability statement how their development proposals contribute towards meeting the opportunities defined in the strategic Sustainability Framework Plans in terms of both wider 'community' and 'environment' issues.

6.101 Knowsley Council will work with developers to coordinate sustainable design and construction measures on both a wider/strategic (macro) and localised building-specific (micro) scale. Key opportunities informing pre-applications discussions are highlighted in the Sustainability Framework Plans and overleaf.

Knowsley Taking Action on Climate Change

Climate Emergency Declaration

As part of the Council's commitment to taking action on Climate Change it is committed to working with partners and stakeholders including businesses, housing providers, environmental organisations and community groups to help them reduce carbon emissions. This section sets out macro and micro scale opportunities to address climate change challenges through development sustainability through design and construction measures.



Figure 6.48 Sustainability - links to wider objectives and policy framework



Figure 6.49 Sustainability Framework Plan
 Not to scale. © Crown Copyright Knowsley MBC 100017655.2020

Macro scale sustainability opportunities

Community and environmental

- Provision of a dedicated pedestrian and cycle network across the site, connecting the whole of the site and to local movement networks, open spaces and areas of ecological diversity.
- Improvements to a number of crossing points where proposed streets, paths and cycle links connect to existing infrastructure, improving the quality of pedestrian and cycle connectivity with Halewood.
- The site is in a sustainable location within close proximity to a range of local amenities and services. Existing and proposed bus and pedestrian/cycle connections encourage sustainable trips to access these services.
- The site is within close proximity to Halewood Shopping Centre, as well as other local retailers, promoting their use of and vitality.
- Provision of allotments and/or community gardens to enable local food production within Finch Woods.
- Water management through SuDS features integrated into the landscape and comprising a network of attenuation features including swales, attenuation basins and rain gardens. Opportunities for these to be enhanced through detailed design measures such as green roofs and grey water recycling where possible.
- Improvements to the existing PRoW providing accessible links between Finch Woods and the Everton F.C. Training Academy as well as connections to the internal footpath and cycle network.
- Generous play and wildlife areas with significant health and well-being benefits, including enhanced community and recreation uses at Finch Woods.
- Ecological improvements and enhancement along Ditton Brook as part of the proposed Flood Storage Area within the Ditton Brook Nature Improvement Area, bringing substantial biodiversity benefits to the area, alongside existing local wildlife sites.
- Network of green links and buffer spaces structuring the edges of urban blocks - green spaces created to mitigate against existing site conditions, with ecologically and historically significant areas retained and enhanced.
- The street hierarchy of Neighbourhood Streets and resultant development blocks have been oriented to generally run in an east-west alignment where possible, which allows elevations to be oriented as close to south as practicable. This approach can help to maximise opportunities for passive solar energy gain and reduced lighting loads through the use of natural daylight through south-facing orientation.
- Sustainable energy and/or waste initiatives.
- Where possible, local sourcing and re-use of materials is encouraged to enhance the sustainability of development.

Public Transport provision

- The site is in a sustainable location close to Halewood train station and local onward connections to Hunts Cross train station, via Halewood Shopping Centre, providing wider connectivity through to longer distance employment and recreation opportunities.
- A number of bus routes are already in place along Baileys Lane, Lower Road and Leathers Lane as well as bus stops within close proximity along Baileys Lane, which provide sustainable links to Halewood Shopping Centre.
- A proposed designated bus route runs through the large southern parcel of the site, sustainably linking future communities with Halewood Shopping Centre and surrounding local amenities. The street geometry and alignments will facilitate an accessible through route for future bus operators and will be provided in line with Merseytravel's design standards. The detailed routing arrangements and frequencies will be subject to further discussions with commercial bus operators.
- Two pairs of bus stops are proposed as part of the bus route, with the majority of the site captured within a 10 minute walk and will be provided in line with Merseytravel's design standards for shelters, signs and kerbs.

Travel planning

Knowsley Council's Ensuring a Choice of Travel SPD (2010) provides guidance to developers on ensuring that their development proposals are accessible and promote sustainable travel patterns. This includes the development of Travel Plans. Applicants should have regard to the requirement of the Ensuring a Choice of Travel SPD and will be required to prepare Travel Plans to accompany their planning applications.

Micro scale sustainability opportunities

- Building orientation should be considered to maximise solar gain.
- Building roof design should not prevent the opportunity for future residents to install Photovoltaic panels, to maximise their efficiency. If solar panels are proposed, a balance should be struck between which location is best in terms of sensitivity to the site's visual appearance and which may be best for energy generation. Solar panels should be integrated within the roofscape, particularly along Avenue frontages. Panels should be positioned so that they consider any other features on the roof (eg. rooflights, dormers etc), providing a visual balance. Panels should be integrated into the roof surface itself rather than being mounted on secondary structures which visually read as a 'bolt-on'. Knowsley Local Plan Core Strategy Policy CS22 and Supplementary Planning Document 'New Residential Development' provides further clarification on the use of solar technology.
- Building orientation and/or tree planting to help to shelter spaces from colder prevailing winds and limit exposure to direct wind passage.
- Building orientation to maximise passive heating, with larger south facing windows to allow passive heat into buildings, with high thermal mass walls creating an insulated barrier to heat loss.
- Building/plot drainage techniques improving natural attenuation, reducing water runoff and contributing to climate adaptation (e.g. green roofs & dwellings with a garden should include provision for rainwater harvesting for irrigation purposes). High standards of water efficiency measures should be utilised through low-flow fittings, low use fixtures and fittings, dual flush WCs, low water use appliances (if provided), low flow showers and reduced volume baths etc.
- Reduction, reuse and recycling of waste in construction, demolition and operation phase, in accordance with the waste hierarchy.
- An approach to natural ventilation which maximises penetration of natural light into flexibly designed spaces for the range of household sizes.
- Imaginative in-home or on-plot storage of waste, recycling and composting and the encouragement of home food production.
- Use of attenuation basins designed to be fully integrated with the surrounding soft landscape or swales (where space is limited) for attenuating storm run-off whilst also potentially also providing valuable habitat areas for local wildlife.
- Appropriate provision of Electric Vehicle Charging Points which is conveniently located within each dwelling plot.
- Provision of rain water harvesting.



Figure 6.50 View towards railway arch

Built Form and Materials Design Guidance

6.102 The townscape analysis identifies that the vast majority of Halewood consists of post war suburban development, with varied quality and character. There are a number of dispersed farmsteads and historic dwellings along the north and east boundaries, which exhibit a more traditional vernacular from which reference can be drawn.



6.103 This built form predominately comprise of red brick with grey slate roofs, but there are also properties with either red sandstone or white render / white painted brick.



6.104 The development will reflect the heritage of the area whilst offering a high quality contemporary appearance to ensure longevity in their style.



This design guide does not prescribe the details of architectural design. It identifies the overall approach to built form and building typologies which will contribute to the character of the development.



Figure 6.51 Sustainability - links to wider objectives and policy framework

6.105 Built form for the East of Halewood site will reflect local materials with predominantly red tones and natural stone details. All buildings and structures will be appropriate to their setting. There must be variety in the residential offering to ensure there are attractive choices for families and individuals of all ages encouraging a diverse new community.

6.106 The following guidance regarding building lines; building heights, corner plots and roof lines is intended to encourage a coordinated response to the composition of street elevations and character.

Building Lines

6.107 In areas of higher density, particularly within Avenues and Neighbourhood Streets, continuous building lines are preferable to help enclose the streetscape and balance the scale of the highway infrastructure. This is easily achieved with terracing, however corner turning detached units can also aid this.

6.108 In areas where the building lines are variable, semi-detached and detached units are better suited due to the breaks between dwellings for driveways.

6.109 Rather than proposing a range of house types which all have the same relationship to the street, to be applied at random, care should be taken to develop a proportion of houses which perform particular roles according to their position in the layout, allowing a more considered approach to street frontage.

Building Heights

In order to create a sense of place and enclosure within different character areas, it is necessary to establish a suitable ratio between

the width of the space or street and the height of the enclosing buildings.

6.110 The the building must be of sufficient height to command the space it defines. Building heights will range from 2 storeys to 3 storeys. However in certain circumstances roof slopes, gables, dormers, chimneys and other skyline features can be introduced to increase the apparent height of buildings and frame the streetscape. The table shown at the end of this chapter demonstrates where these principles can be applied within the respective character areas.

Corner Plots

6.111 Corner plots can aid way finding or create an impression of an entrance into a site and frame nodal points.

6.112 In order to add interest to corner plots and build an active frontage, dwellings should allow for animated side elevations.

6.113 This will involve introduction of overlooking fenestration or additional detailing in finishing materials. In appropriate locations L-shaped blocks can also be used to help turn corners.



Corner turning unit designed with strong fenestration overlooking both streets.

Roof Lines

6.114 Developers each have a variety of house types which they will use on different sites, partly depending upon market demand in that area. Often, each house types have similar and varying roof and ridge heights. Although the roof and ridges of developer house types vary in form, there are opportunities to create a co-ordinated streetscape, which sees the step up/down in roof eaves and ridge heights managed in a considered way.

6.115 Differences in roof eaves and ridge heights are accepted, however there should be an avoidance of irregular and random variation in eaves or pitch angles heights from property to property. This is a key consideration in creating a cohesive streetscape character and appearance across the different development parcels within the site and where infrastructure connects between parcel ownerships. It

also should reflect the height and scale of Halewood's existing residential context and be appropriate to its surroundings (Knowsley's New Residential Development SPD provides additional guidance).

6.116 Where variation is present, this should be applied in a composed manner, for example through grouping of types. In this way, thoughtful variation can help to emphasise nodal locations, react to open spaces or establish corridors.

6.117 The Council welcome the opportunity to work with applicants to achieve a layout that considers the overall streetscape composition of their proposals

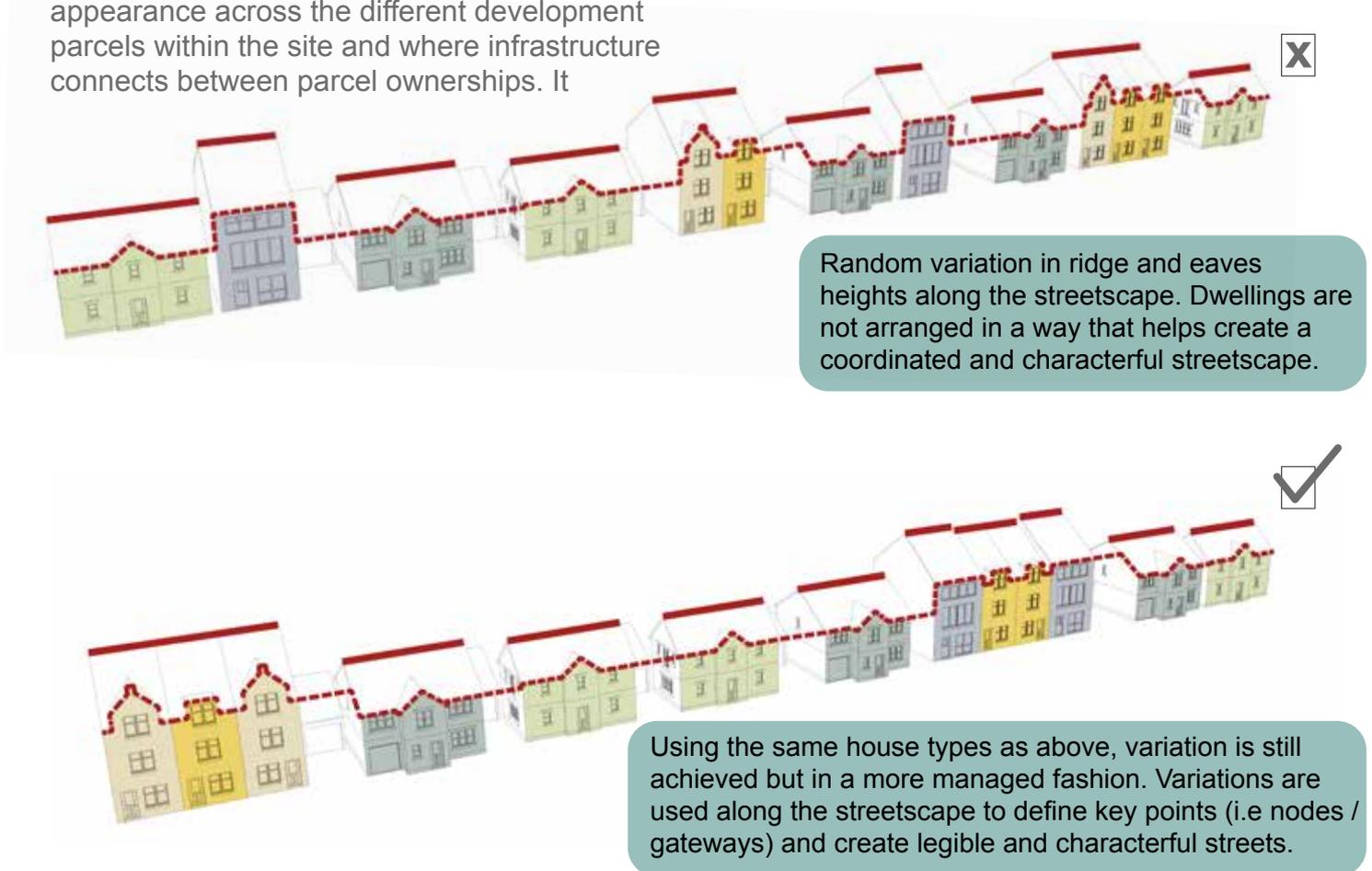


Figure 6.52 Considering the composition of development roofline and street composition

Form and scale details to be considered		Character Areas					
		Higher Road Approach	Community Core	Woodland Edge	Country Edge	Halewood Lane End	Plantation View
Building Lines	Preference for variable building line	X	Building line becomes more varied along lower order routes and shared private drives	X	✓	✓	X
	Preference for L-shaped blocks	X	Used only on key nodes & gateways	✓	✓	X	✓
Corner Plots	Animated side elevations	✓	✓				
	Areas where variation in eaves and ridges is more appropriate	X	Consideration for regular eaves & ridges with some variation where appropriate (i.e. nodes / gateways /overlooking greenspace).	Stepped change used primarily on key nodes & gateways	✓	X	Stepped change used primarily on key nodes & gateways
Building Storeys	2	Away from main frontages	✓	Limited use	✓	✓	✓
	opportunities for 2.5	✓	✓	✓	✓	✓	✓
	opportunities for 3	✓	✓	✓	X	Used only on key nodes & gateways	✓

Table 6.20 **Built form summary**

The guidance above is to be considered when composing streetscenes across character areas. Its is intended to show a preference towards a built form approach depending upon the character area. However, the interpretation of each form and scale detail outlined above can be agreed upon through planning applications.

Materials Palette

Development across the site will draw upon a common palette of material and specifications which are detailed in the opposite swatches.

This approach to a common and coordinated palette of materials will help establish a strong identity for the development and a strong sense of place for East of Halewood

The materials guidance and specifications proposed for the site have been derived from the townscape analysis of the surrounding Halewood context and aims to create an individual yet specific character for the development.

Specific materials and specifications for each phase will be determined by the Council as part of the planning applications, but with reference to the materials palette set out in this guide.



Walls and Elevations

- Textured brick on a red palette.
- The material and colour is to be consistent within street scenes as well as the separate development sites.
- White or cream render.

Roofing

- Standard tiles acceptable (roof and ridge tiles must be the same colour).
- Materials and colour to be consistent within street scenes as well as the separate development sites.
- Eaves and ridge height to be consistent across connected elevations and street scenes.

Rainwater Goods & Bargeboards

- Rainwater goods to be coloured black and concealed from view.
- Bargeboards to be white or black.

Meter cupboards and Electric Vehicle Charge points

- Consideration should be given to the provision of meter boxes and their visual impact.
- Orientation for meter boxes should be consistent as part of the street elevation.
- Opportunities to recess meter boxes within cavity wall should be explored.
- Meter boxes and EV charging points should have consistent colour with rainwater goods.
- Where development includes properties such as town houses, developers will be required to consider how EVC points are provided whilst ensuring that they are not dominant on the dwelling.

Windows

- Window frames are to be coloured white or black, however must be consistent with the street scene.

Boundary Treatment

- Front boundaries along Avenues should consist of low brick walls with metal railings. Brick material should match the adjacent property.
- Front boundaries along neighbourhood streets should consist of metal railings.
- Boundary treatments along lower order routes should include formal hedge planting.
- Boundary treatments should be consistent along each street scene (refer to street hierarchy specification).
- Where it is necessary for the rear of residential curtilages adjoin public spaces, walls will be required. In more rural boundaries, including the Country Edge and Plantation View character areas, this boundary should instead consist of a native hedge.
- Where fence panels are visible from street scenes or highways (including side gates to back of driveways), finishes to be treated and stained in a dark brown colour.
- Other boundaries, for example, around SuDS must be carefully considered as to how they integrate with the surrounding area. If a boundary is deemed to be required at all, it must be ensured that it is of a design that suits the character of the location and not of a height that has a negative visual impact or detracts from the streetscene. High quality planting should be used to reduce the impact of any boundaries (refer SuDS guidance for details).

Driveways

- Driveway material and colours are to be consistent across connected elevations and street scenes (refer to street hierarchy specification).

Lighting Columns, Street Furniture and Utility Boxes

- All of the above are to be coloured black.

› Key Spaces and Places

Introduction

6.118 The placemaking response for East of Halewood is holistic; coordinating public open spaces with built form and a legible movement network across the whole of the masterplan area. This approach is demonstrated by the Illustrative Masterplan (Figure 6.54) adjacent.

6.119 Although for illustrative purposes only, the Illustrative Masterplan sets out an interpretation of the key requirements of the Development Framework (Chapter 05).

6.120 It demonstrates the aspiration for a new residential neighbourhood at East of Halewood, illustrating how a clear, rational and cohesive development structure should respond to existing assets, whilst maximising the opportunities that can be achieved through development within the site and proposals within Halewood.

Key Spaces and Places

6.121 The design guidance discussed in Chapter 05 articulates the specific design criteria for the various elements that combine to create successful and meaningful places to live.

6.122 This chapter uses illustrative material to demonstrate how key spaces and places within the masterplan could be delivered. These are a variety of significant places which exist across the site and they serve to have the greater impact on the benchmarking of the site as well as it's ability to successfully integrate with Halewood.

6.123 The following key spaces and places have been identified (which are shown on Figure 6.55 on the following page);

- Yew Tree Gateway
- Halewood Lane Ends
- Finch Woods wrap & Leisure Hub
- Ditton Brook Corridor



Figure 6.53 Key spaces - links to wider objectives and policy framework

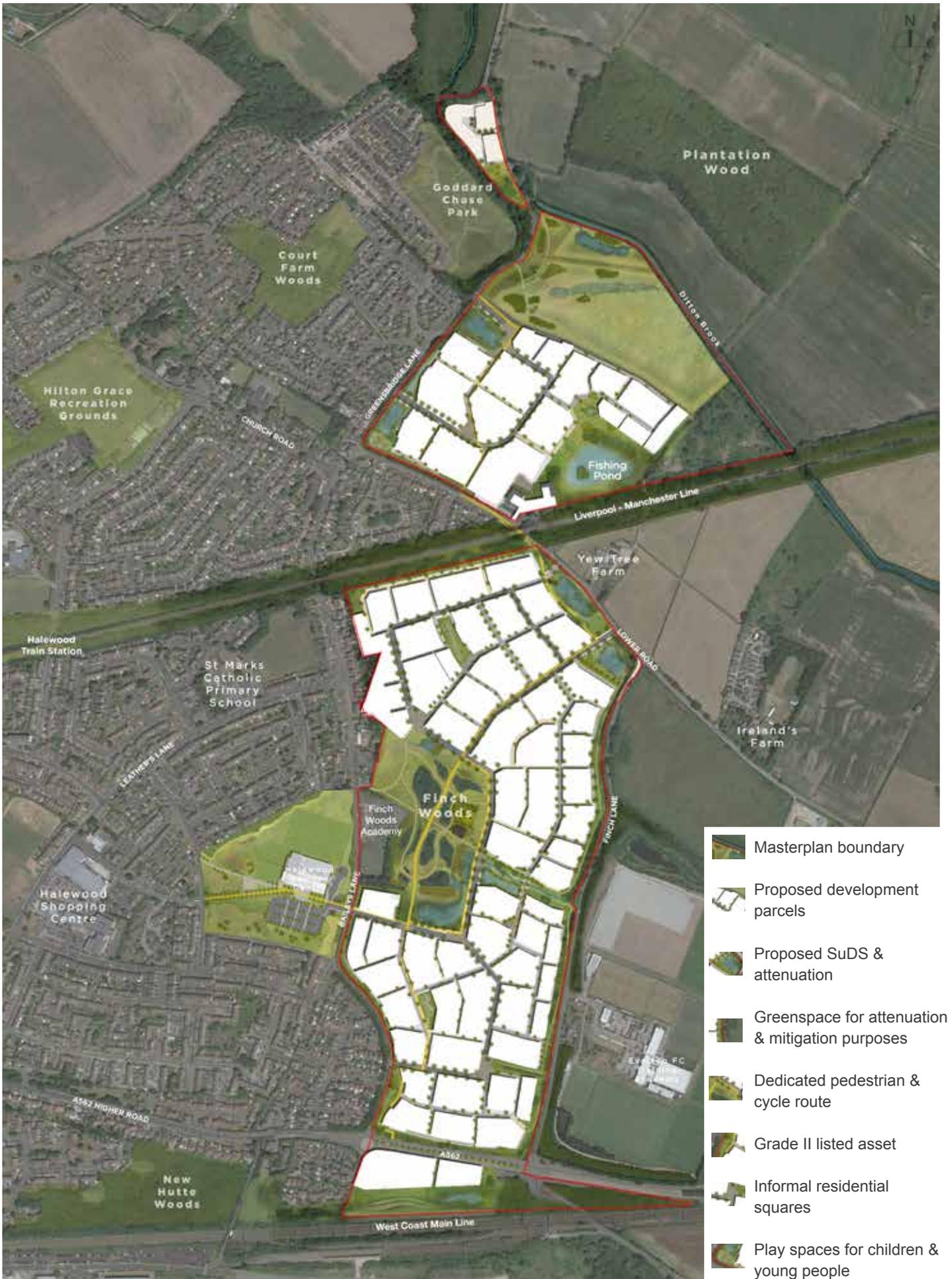


Figure 6.54 Illustrative Masterplan

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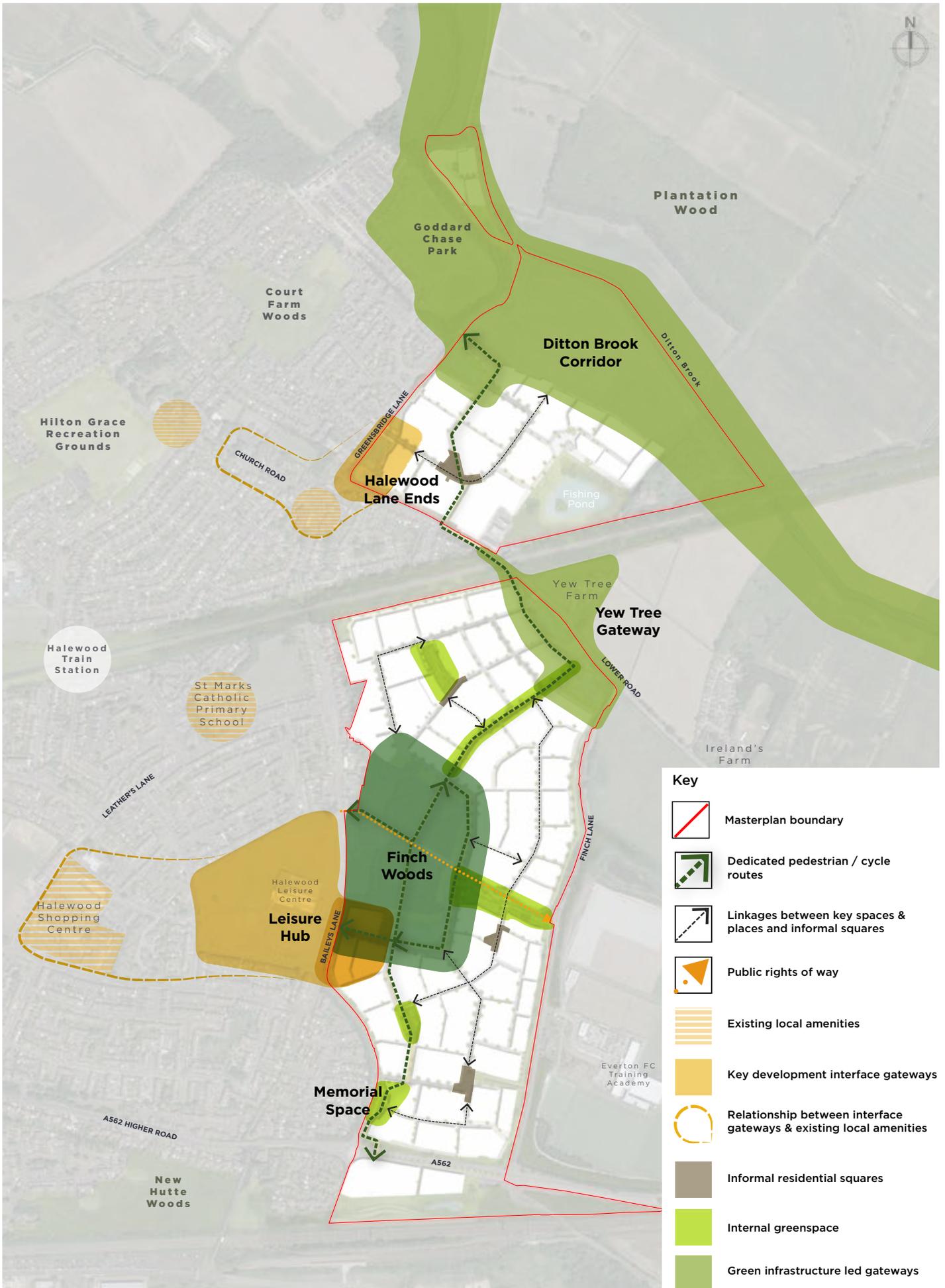


Figure 6.55 Key Spaces and Places strategy plan

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Yew Tree Gateway

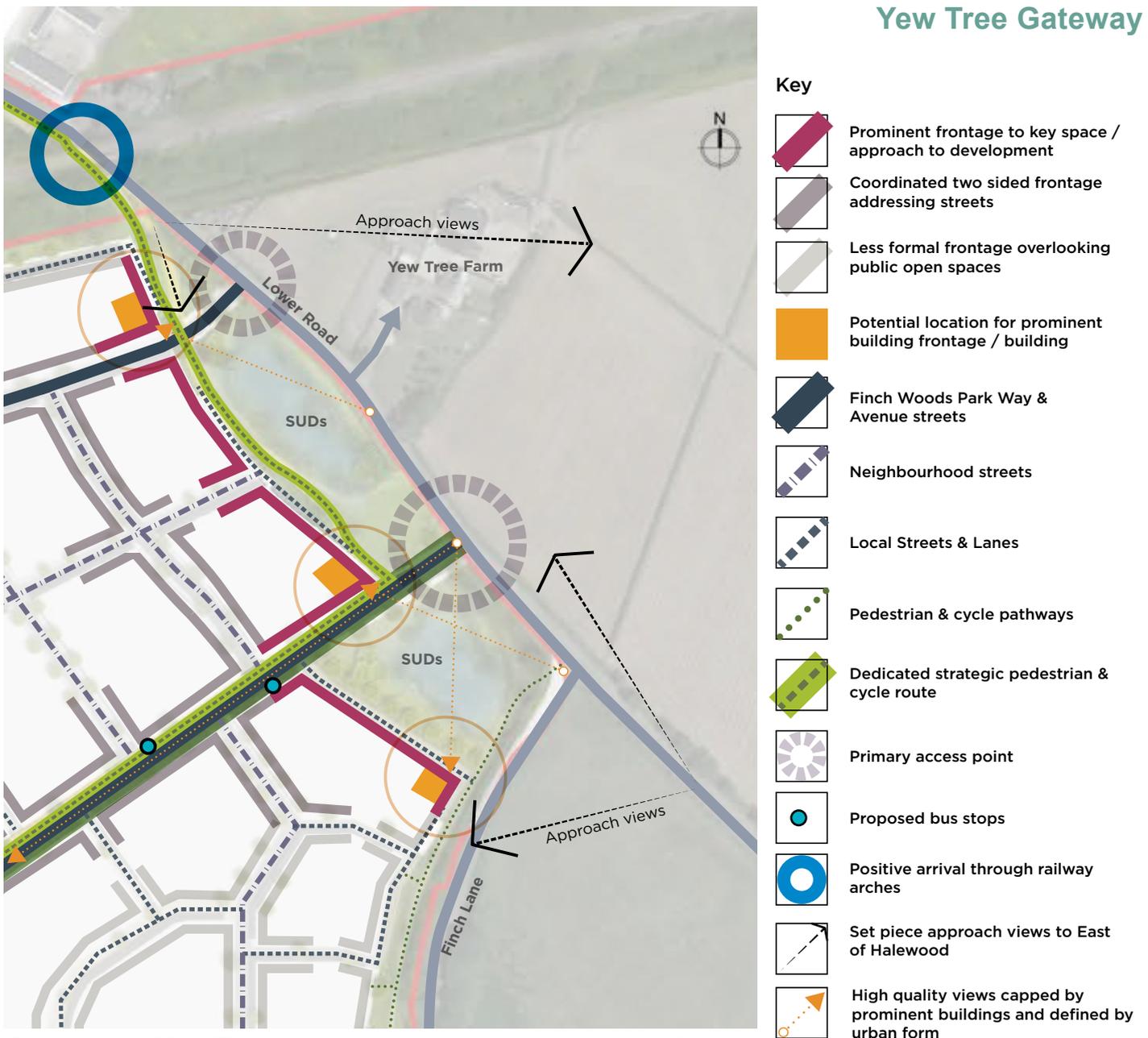


Figure 6.56 Yew Tree Gateway placemaking opportunities

Placemaking opportunities

- A lower density, semi-rural area (c.25-30dph), handling the transition to open countryside and existing farmsteads.
- A prominent development frontage is orientated to overlook the wetland landscape and pedestrian cycle route.
- Frontage steps back from the viaduct, celebrating and framing views of it as you move towards it.
- Frontage steps back in the north-eastern corner to respond to the surrounding rural character.
- Landmark buildings located on visually prominent corners creating strong visual identity cues
- Pedestrian and cycle route meanders through public open space and passes under a highway arch and onwards through the northern section of the site.
- Interesting and inviting views into the site along the key Avenues, capped by a landmark building.
- A varied Avenue street geometry which naturally calms vehicle speeds.
- Perimeter blocks orientated to overlook streets and open spaces.
- Pedestrian and cycle route continues towards Finch Woods through linear public open space, adding interest to the route.

Yew Tree Gateway



Figure 6.57 Yew Tree Gateway and Yew Tree Farm

Yew Tree Gateway



Halewood Lane Ends

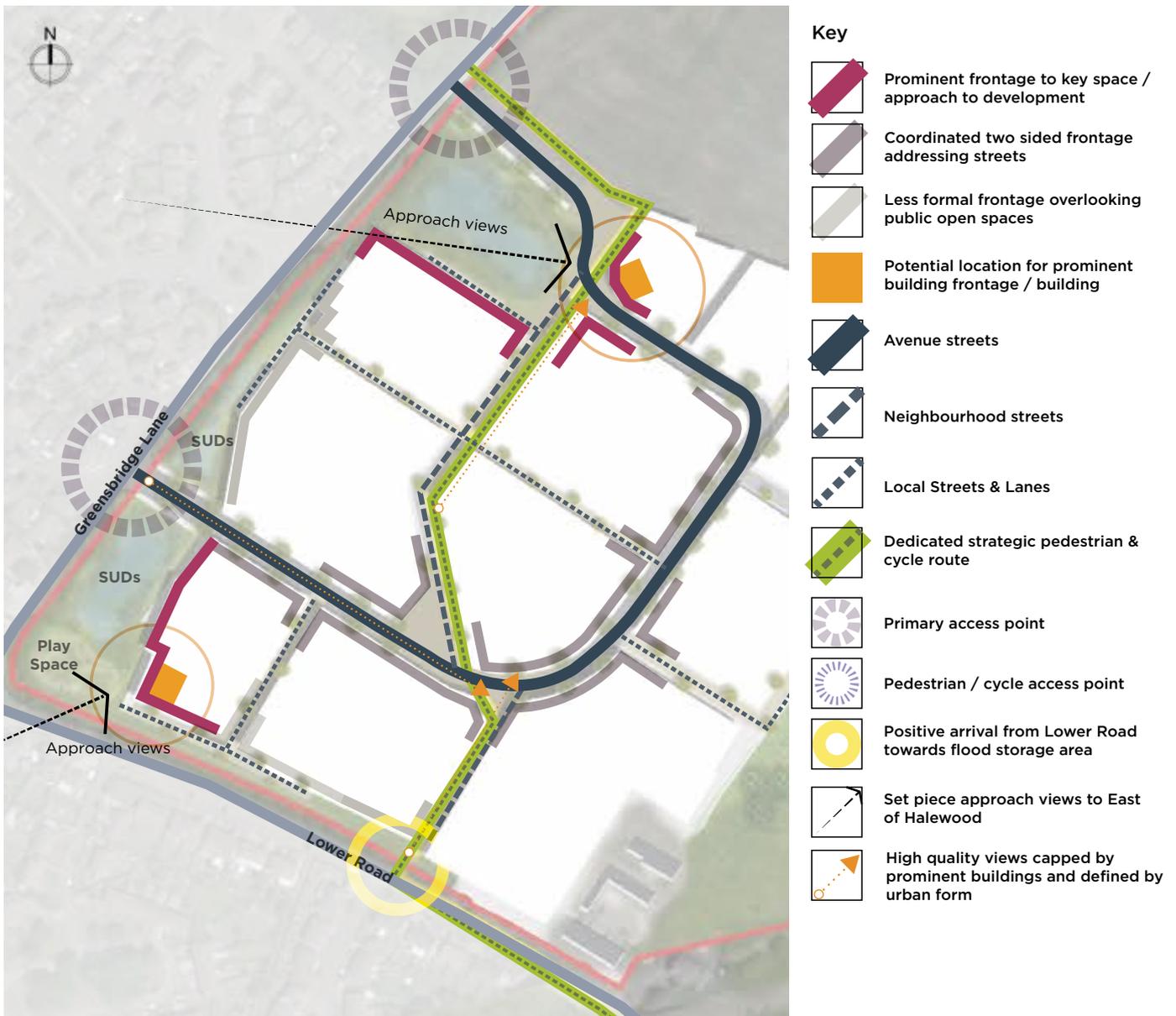


Figure 6.58 Halewood Lane Ends placemaking opportunities

Placemaking opportunities

- Restoring the current cross roads between Greensbridge Lane and Lower Road through new development, SuDS and public open space;
- The current substation is removed from its visually prominent position and replaced by open views into the site.
- Visual connectivity through new public space connects new residential development with the more historic and strong visual identity of the Lane Ends part of Halewood;
- Prominent frontages are orientated to overlook areas of public open space and SuDS creating high levels of passive surveillance;
- Pedestrian and cycle connection provides a new recreational link between Lower Road, through the development and onto the Flood Storage Area. Arrival threshold through the existing hedgerows and runs northwards;
- Prominent buildings located in areas that are visible upon approach and/or overlook areas of SuDS and recreational spaces. These buildings help provide visual cues to aid with legibility as well as becoming more visually connected with Halewood.



Figure 6.59 Residential development overlooking greenspace

Halewood Lane Ends



Figure 6.60 View towards Halewood overlooking Halewood Lane Ends



Avenue

Locally Equipped
Area of Play

SuDS basin

Greensbridge Lane

Finch Woods Wrap & Leisure Hub

6.124 The relationship between Finch Woods and Halewood Leisure Centre will be improved through the delivery of a new residential neighbourhood to the east of Baileys Lane.

6.125 Finch Woods sits at the heart of East of Halewood. New development will play a key role in celebrating this public open space, positively fronting onto and framing it.

6.126 The woodland itself is also an important component of this key space as well as the relationship with new residential development.

6.127 Halewood Leisure Centre is a key pedestrian link between East of Halewood and Halewood Shopping Centre and connectivity across Baileys Lane will be improved.

6.128 High level concepts are being developed for Finch Woods and the Leisure Centre, which are in the very early stages of development. Finch Woods is to be enhanced and improved and the Leisure Centre is to have a diversified outdoor sports provision and improved pedestrian connections to Halewood Shopping Centre.

6.129 This chapter discusses the placemaking opportunities that new development can capitalise upon within the Woodland Edge. It also provides some high level initial principles for Finch Woods and the Leisure Hub.



Figures 6.61 - 6.64 Examples of the various SuDS and attenuation basins which could be used around Finch Woods



Figure 6.65 Finch Woods and Baileys Lane entrance placemaking opportunities

Placemaking opportunities

- A higher density, urban setting (c.35-40dph), with a prominent development frontage orientated to overlook and frame an enhanced Finch Woods;
- Frontage along the Avenue is more formal with up to 3 storey development addressing the woods;
- A prominent arrival gateway from Baileys Lane, with development on either side of the Avenue. A high quality arrival threshold which opens up to reveal the woods and SuDS areas;
- Landmark buildings located on visually prominent corners creating strong visual identity cues and which cap internal views across the area;
- Pedestrian and cycle route continues along Avenue streets and public open space. It also connects to an improved PRoW and westwards onto Baileys Lane;
- A network of pedestrian paths meander through Finch Woods connecting new development with Baileys Lane;
- Transition between development and Finch Woods managed through SuDS and landscape;
- Inviting views towards Finch Woods along Avenues;
- A varied street geometry along Avenues which naturally calms vehicle speeds.

Finch Woods

Placemaking opportunities

- Selective removal of targeted areas of the existing woodland will be cleared to improve the visibility throughout the area and open up views, creating a safe and attractive environment for visitors.
- Carry out woodland management to remaining areas of woodland to encourage good growth and species diversification of the remaining trees, enhance further by planting native woodland ground cover plants.
- Improve pedestrian access by creating a good path network, linking with adjacent residential areas, footpaths and cycleways. A new central shared pedestrian and cycling route will direct people through the site and link with a crossing point on Baileys Lane, to link to the Leisure centre and local facilities beyond. Culvert or pedestrian bridges will link across drainage ditches to connect with key routes throughout the masterplan area.
- A new play area with a woodland theme to be included to the east of the site with a good level of visibility from the adjacent residential area, to promote natural surveillance. Amenity grass areas surround the formal play will introduce space for free play and other informal play features will be located around the site to create a play trail through the woods.
- Buffer planting is proposed to the boundaries of Highfield School and residential properties which back on to the site. Species to include native fruit trees and bushes to provide opportunity for foraging.
- The existing ponds to be enhanced with native wetland planting and access improved. A boardwalk and viewing platform will give visitors the opportunity to safely access the water bodies. The pond to the south to link into the feature SUDS system and to the north will tie into existing drainage ditches.
- To the North West of the site, scrub will be cleared and large area to be sown with species rich grass mixes with mown grass paths to provide informal access. These meadows to include wet and dry areas further enhance species diversification.
- Feature waymarking and signage, bespoke entrance features and art features will provide a local distinctiveness to the woodland, providing an identity as a high quality public green space within the larger East of Halewood development.



Figures 6.66 - 6.68 Examples of the types of interventions envisaged at Finch Woods



Figure 6.69 Finch Woods concept zoning plan

Finch Woods Wrap & Leisure Hub



Figure 6.70 View towards Finch Woods and Halewood Leisure Centre

Finch Woods Wrap & Leisure Hub

SuDS basin Baileys Lane Retained woodland Public Right of Way Existing drainage ditch Play Area



Finch Woods
Park Way

Leisure Hub

Placemaking opportunities

- Selective removal of targeted areas of the existing woodland will be cleared to improve the visibility throughout the area and open up views, creating a safe and attractive environment for visitors.
- Carry out woodland management to remaining areas of woodland to encourage good growth and species diversification of the remaining trees, enhance further by planting native woodland ground cover plants.
- Improve pedestrian access by creating a good path network, linking with adjacent residential areas, footpaths and cycleways. A new central shared pedestrian and cycling route will direct people through the site and link with a crossing point on Baileys Lane, to link to the Leisure centre and local facilities beyond. Culvert or pedestrian bridges will link across drainage ditches to connect with key routes throughout the masterplan area.
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- Feature waymarking and signage, bespoke entrance features and art features will provide a local distinctiveness to the woodland, providing an identity as a high quality public green space within the larger East of Halewood development.



Figure 6.71 Existing view towards Halewood from the Leisure Centre entrance



- | | | | |
|--|---|--|---|
| | Existing trees to be retained | | Vehicular access (Parking and road) |
| | Proposed native screen planting | | Improvements to boundary fence - reduce height to open up |
| | Proposed ornamental avenue and feature tree planting | | Removal of secondary fence line |
| | Proposed feature wall and planting to enhance main entrance | | Proposed ball stop fencing to MUGA |
| | Proposed ornamental shrub planting | | Proposed fencing to service yard |
| | Wildflower meadow creation | | Focal point/ feature which could include art installation, seating area and or interpretation |
| | 4m wide pedestrian/ Cycle way | | Main entrance point |
| | 3m wide pedestrian path | | |

Figure 6.72 Leisure Centre concept zoning plan

Ditton Brook Corridor

Placemaking opportunities

- The Flood Storage Area is to be improved to provide an informal green space with a range of natural features to improve biodiversity. Access will be limited to the west of the site to provide links though to Goddard Chase Park and a new path created which will require steps and ramps to address the significant height difference. The land shaping will see shallower gradients in this area to improve access and provide a more natural appearance
 - The existing river corridor will be enhanced by introducing new wetland species and some areas of wet woodland planting. 8m maintenance access to be retained for Environment Agency.
 - To the North of the site, a series of connected ponds, and ephemeral scrapes will be created, enhanced with marginal and wetland planting.
- Areas of native woodland planting will be introduced to increase the biodiversity of the site and assist in providing a more natural appearance to the proposed land shaping.
 - To the South and East of the site dry meadow areas will be created to provide suitable habitat for skylark and lapwing mitigating for habitat lost elsewhere in the area. The slope from the residential area will be steeper in this area to discourage access.
 - Develop a more formal landscape to the southern interface with the proposed residential development. Views across the site to be framed with new tree planting and low fencing to define the site and prevent direct access.



Figure 6.73 Existing view east along Ditton Brook with SUE area to the right of the river corridor



- | | | | | | |
|--|--|--|---|--|---|
| | Existing woodland planting | | Area to be seeded with river flood plain seed mix | | Sloped ground |
| | Existing hedgerow retained and enhanced | | Area to be seeded with native dry meadow mix | | Path junction points with feature paving |
| | Proposed wet woodland planting | | Proposed low railings | | Location of water main with 14m easement |
| | Proposed Ponds / Water bodies | | Proposed semi-mature tree planting | | Natural play feature / Informal seating |
| | Ephemeral ponds/Scrapes with wetland planting damp meadow seed mix | | 2m wide footpaths to be raised in wet meadow area | | Seating |
| | Wetland/ reedbed planting | | Entrance focal points with signage | | Indicative future links into Goddard Chase Park |
| | Rock mattress weir | | Steps or ramped access | | |
| | Amenity Grass | | Recycled plastic board walk | | |

Figure 6.74 Ditton Brook concept zoning plan

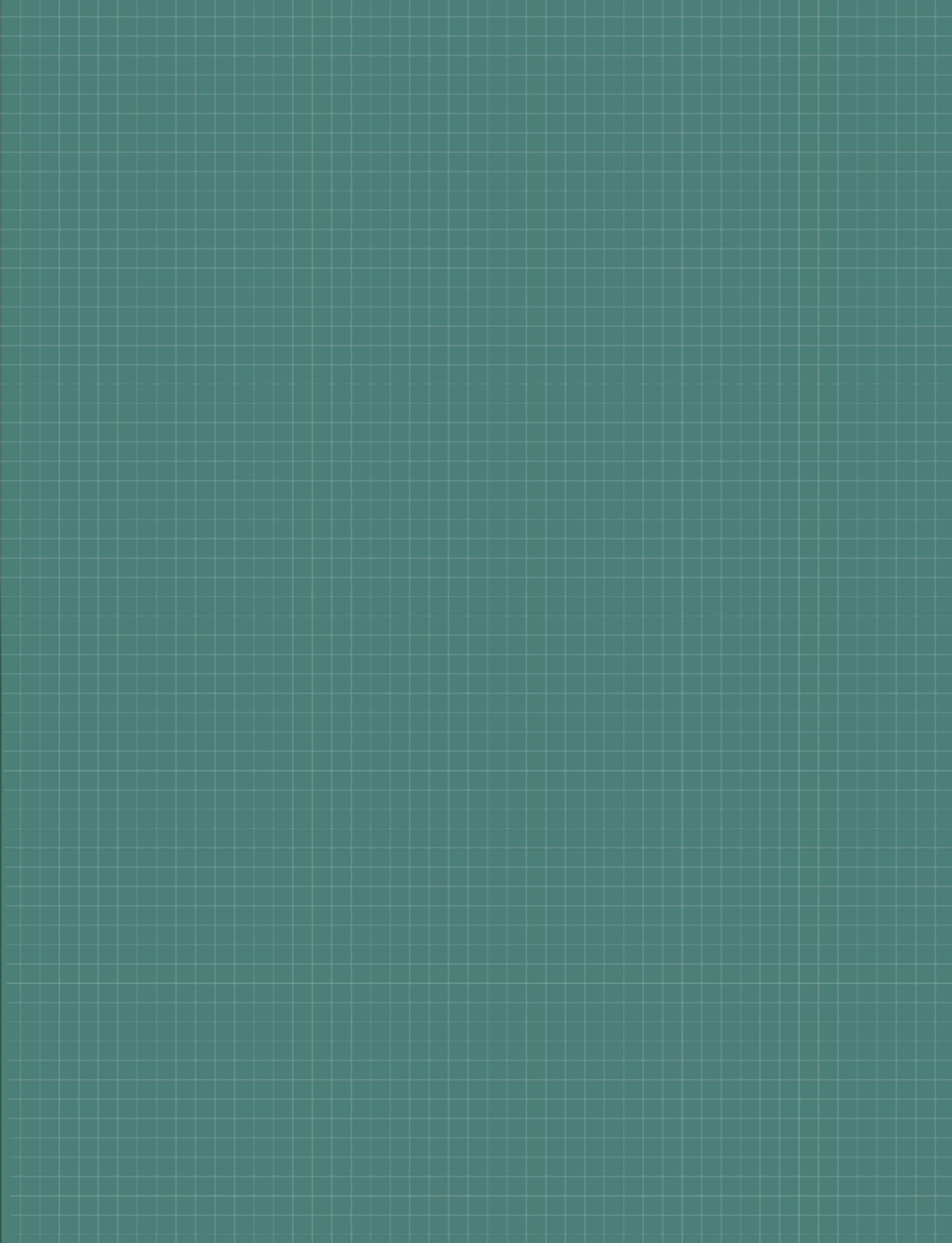
> Appendices

- Appendix A Delivery & Implementation Strategy
- Appendix B Tree Planting
- Appendix C Hedge Planting
- Appendix D Shrubs, Perennials & Bulbs
- Appendix E Wildflower Meadow
- Appendix F Aquatic & Emergent Planting
- Appendix G Maintenance Schedule

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› **Appendix A**

Delivery & Implementation Strategy



> Delivery and implementation strategy

This Technical Appendix will be reviewed regularly and updated as necessary to reflect the latest information and position relating to the delivery and implementation of the East of Halewood Masterplan.

Introduction

7.1 Like any major development, East of Halewood requires the delivery of strategic and local infrastructure to unlock the development site, and to mitigate the impact of development for the benefit of new residents and the existing community. Securing comprehensive development is a key principle of the Council’s Masterplan document; this appendix provides practical guidance as to how this can be achieved, primarily through the planning process. It includes:

- Infrastructure Delivery Strategy
- In Kind Delivery of Infrastructure
- Developer Contributions and “Roof Tax”
- Planning Application requirements

7.2 The majority of the East of Halewood site is in private ownership, and the private sector will take a lead role in assembling development parcels, gaining planning permission and

delivering development. The private sector will also take primary responsibility for delivering the necessary infrastructure to support the delivery of the site.

7.3 The Council will actively assist the private sector in delivering development at East of Halewood, through positive collaboration in the planning process, with the aim that development satisfies the requirements of the East of Halewood Masterplan. The Council will take a lead on selected elements of the expenditure of funds secured through developer contributions for infrastructure and services provided by the Council; other public sector partners will also have a role to play here. It is expected that different private sector partners will work with each other as well as with the Council and its partners; a consistent approach to collaboration will benefit all parties through the realisation of comprehensive development.



Figure A.1 Delivery & implementation strategy - links to wider objectives and policy framework

› Infrastructure delivery strategy

A

7.4 The Council is committed to exploring external funding opportunities to deliver additional and/or complementary infrastructure at East of Halewood where appropriate, in addition to that identified for delivery by the private and public sector in accordance with the Masterplan requirements. However, at the current time it should be noted that there is no guarantee of availability of external funding; this Technical Appendix will be updated with any future updates on external funding bids.

7.5 Planning applications must accommodate and provide for the necessary infrastructure to open up successive complementary development parcels to ensure that the whole of the East of Halewood opportunity is realised. This Technical Appendix identifies the critical infrastructure interdependencies between development parcels.

A1 Infrastructure Delivery Strategy

7.6 The following principles have been adopted in preparing a strategy for infrastructure delivery to support the East of Halewood Masterplan; these principles respond both to the requirements of Local Plan policy, the East of Halewood SPD and specific delivery challenges identified through the preparation of the East of Halewood Masterplan:

- **Sufficiency of infrastructure** – to deliver supporting infrastructure as identified by the East of Halewood Masterplan and engagement with infrastructure providers;
- **Delivering comprehensive development** – ensuring that the opportunity of East of Halewood is realised in full, with all phases of development contributing to this aim;
- **Release of third party land** – deliverability for all parcels of land within the site, including those landlocked by other landowners;

- **Recognising interdependency** – ensuring that shared infrastructure is delivered across different parts of the site, and that some parcels will depend on each other to deliver infrastructure and comprehensive development
- **Proportionality of cost** – that strategic infrastructure costs are shared proportionately and fairly between development parcels, so that no parcel bears a disproportionate cost;
- **Timing of delivery** – ensuring that infrastructure is delivered in a timely manner alongside development programmes;
- **Minimising risk** – putting measures in place to ensure that the infrastructure strategy minimises the risk of the East of Halewood site not coming forward in a timely, coordinated and comprehensive manner;
- **Accelerating growth** – providing clarity for developers and applicants about the infrastructure to be delivered through the East of Halewood development.

7.7 Developers will be required to deliver infrastructure in kind, and also make appropriate and proportionate contributions towards the delivery of strategic infrastructure. Table A1 sets out each infrastructure category, a brief summary of the baseline position, a basic description of in kind works needed, and a simple description of the extent of developer contributions, as the Council understands them at the time of publication of this Technical Appendix.

7.8 This table has been ordered in accordance with the Developer Contributions hierarchy in the Council's Local Plan and Developer Contributions SPD. Further detail is provided in the remaining parts of this Technical Appendix.

Infrastructure Category	Baseline provision
Highways and Junctions	<p>The site is accessible via Greensbridge Lane, Lower Road, Baileys Lane, Aldersgate Drive, and potentially Higher Road, subject to removal of existing layby.</p> <p>Scale of development will generate the need for off-site highways / junctions improvements, proportionate to the impact of the development. Masterplan identifies scope for works, with reference to modelling evidence.</p>
Flood risk mitigation / safety	<p>Part of northern site in Flood Zone 2 and 3 (highest zones). Developer proposal to engineer site levels to create Flood Storage Area to mitigate flood risk / maximise developable area.</p>
Public transport	<p>The site is near Halewood railway station, and Halewood bus terminal. There are local bus stops on Baileys Lane and Lower Road and a disused bus stop on Greensbridge Lane.</p>
Walking and cycling	<p>The site has limited accessibility for walking and cycling currently, links to public transport hubs and local facilities need improvement. There is a Public Right of Way (PROW) across the site between Baileys Lane and Finch Lane, via Finch Woods.</p>

Table A.1 Infrastructure delivery

In-kind provision by developers	Scope of developer contributions
<p>Site access and internal routes:</p> <p>New highway access points and internal highway infrastructure to be provided by developers in accordance with the Masterplan Access and Movement Plan. s278 and s38 agreements with the Council will be necessary. Street lighting commuted sum and dowry of maintenance materials for internal highways also required.</p> <p>Layby:</p> <p>Works are also required to in-corporate the existing layby off Higher Road into the development site, and to improve the environment of the High-er Road corridor.</p> <p>Off site works:</p> <p>Developers may work together to undertake junction model-ling, design and deliver the necessary off-site highway and junction improvement works, with reference to the scope within the Masterplan document, to be agreed with the Council through the planning and s278 agreement processes. Alternatively, works may be delivered through developer contributions (see over).</p>	<p>Off site works:</p> <p>Developer contributions may be collected for Council delivery of off site highways works, with the details to be agreed with the Council at the planning application stage, with reference to the Masterplan guidance. Alternatively developers may work together to deliver works in kind (see over).</p>
<p>Flood Storage Area (FSA) to be delivered by the developer in kind as part of the engineering works required for the northern parcel, in accordance with the Masterplan Framework Plans.</p> <p>If works to address flooding issues off site are required, developers will be expected to arrange the direct delivery of these works.</p>	<p>n/a</p>
<p>A new bus route through the site will be pursued; this will require wider carriageways and four new bus stops, in accordance with the Masterplan Access and Movement Plan.</p>	<p>Developer contributions will be sought to facilitate a subsidised bus service within the site, as necessary in advance of operation of a commercial service.</p>
<p>Site access and internal routes:</p> <p>Walking/cycling access points and internal routes to be provided by developers in accordance with the Masterplan Access and Movement Framework Plan. s278 and s38 agreements with the Council will be necessary. PROWs to be maintained within site.</p>	<p>Off site works:</p> <p>Developer contributions towards Halewood Leisure Centre will facilitate an upgraded walking/cycling route within this site, linking to Halewood Shopping Centre – to be delivered by the Council/Volair.</p>

Infrastructure Category	Baseline provision
Walking and cycling (cont.)	
Public open space - Children and Young People, Allotments, Parks and Gardens, Amenity greenspace	The site is within its own Substantial Residential Area for Public Open Space and therefore should be self-sufficient. Neighbouring SRAs are in overall deficit for POS. Masterplan identifies on site POS, performing a range of attenuation, mitigation, recreation and place-making functions.
Outdoor sports	There is insufficient surplus capacity to accommodate the demand arising from new development (proposed EFC pitches will not be publicly available).
Education – Primary	There is insufficient local capacity to accommodate all of the demand arising from new development. Local Education Authority has advised on methodology for identifying needs for additional capacity.
Education – Early years	There is insufficient local capacity to accommodate the demand arising from new development. Local Education Authority has advised on methodology for identifying needs for additional capacity.
Health care	There is insufficient built capacity currently available to accommodate the demand arising from new development, in particular for GP surgery space.
Public realm enhancements	Public realm within / adjacent to the site may require improvement to reflect greater usage.
Affordable housing	Local Plan policy requires 25% of the new housing to be provided within affordable tenures – including affordable rent and intermediate (shared ownership / affordable home ownership) products.

Table A.1 Infrastructure delivery (cont.)

In-kind provision by developers	Scope of developer contributions
<p>Off site works: Developers may work together to deliver the necessary off site walking/cycling improvements, including access to transport hubs and existing facilities as identified within the Masterplan. Alternatively, works may be delivered through developer contributions (see over).</p>	<p>Developer contributions may be collected for Council delivery of off site walking and cycling improvements, with the details to be agreed with the Council at the planning application stage, with reference to the Masterplan guidance. Alternatively developers may work together to deliver works in kind (see over).</p>
<p>Public open space to be provided on site by developers in accordance with the Masterplan Green Infrastructure and Public Open Space Framework plans. See Tier guidance for further details.</p> <p>Developers will need to make arrangements for the long term maintenance of POS.</p>	<p>Developer contributions will be sought towards works to the centralised public open space of Finch Woods, and long term maintenance of this area; works to be delivered by the Council.</p>
<p>n/a</p>	<p>Developer contributions will be sought towards off site provision of pitches and other improvements within Hale-wood Leisure Centre; works to be de-livered by Volair / the Council.</p>
<p>n/a</p>	<p>Developer contributions will be sought towards expansion of existing primary schools within Halewood, works to be delivered by the Council or school operator.</p>
<p>n/a</p>	<p>Developer contributions will be sought towards expansion of existing facility and/or new facilities; works to be delivered by the Council or nursery operator.</p>
<p>n/a</p>	<p>Developer contributions will be sought towards refurbishment of capacity within existing health centre(s) in Halewood, to be delivered by Knowsley Clinical Commissioning Group and/ or partner organisation.</p>
<p>If needed, developers may work together to deliver the necessary public realm enhancement to mitigate the impacts of development.</p> <p>Alternatively, works may be delivered through developer contributions (see over).</p>	<p>If needed, developer contributions will be sought towards enhancement of local public realm to mitigate the impacts of development.</p> <p>Alternatively developers may work together to deliver works in kind (see over).</p>
<p>Developers will be expected to provide policy-compliant levels of affordable housing on site. S106 legal agreements can be used to secure affordable housing provision within the site, including ensuring perpetuity of tenure.</p>	<p>n/a - Financial developer contributions not considered necessary due to in kind provision on site.</p>

Infrastructure Category	Baseline provision
Decentralised energy	Local Plan policy seeks consideration of delivery of decentralised energy schemes outside of the Knowsley Business Park priority zone, only where deliverable.
Utilities – electricity	Easements / re-routing for existing infrastructure required. Significant restrictions for access over Finch Lane. Re-routing of 132kv cable required. Relocation of existing substation (Lower Road/Greensbridge Lane) required.
Utilities – gas	Cadent confirmed reinforcements needed to deliver capacity to support new development.
Utilities – water supply	Easements / re-routing for existing infrastructure required. Water main to north of site cannot be rerouted. Any drainage schemes (surface and foul water) will need to be of a higher design quality than standard if they sit within the Source Protection Area.
Utilities – waste water	Easements / re-routing for existing infrastructure required. Requirement for waste water pumping stations. Existing pumping stations within the site may need further development.
Sustainable Drainage (surface water)	SUDs to manage surface water drainage and prevent use of sewer drainage for surface water. Surface water pumping stations only to be used where SUDs approach not deliverable.
Ecology	Nature Improvement Area / Local Wildlife Site along Ditton Brook corridor. Presence of protected species on the site to be confirmed.
Ecology – European Habitats	Likely to create recreational pressure on functionally linked protected habitats, hence mitigation required.
Arboriculture	2-for-1 replacement policy for all tree loss. Likely to be net increase in tree planting across the site as a result of the development. Hedges to be retained and/or replaced where possible.
Ground conditions	Evidence to be established; no early indication of significant ground conditions issues.
Control of Major Accident Hazards	Majority of the site sits within the Outer Consultation Zone for Vertellus. The HSE will not advise against general residential or commercial development in this location, but would advise against school uses (1.4ha+) or institutional residential uses.

Table A.1 Infrastructure delivery (cont.)

In-kind provision by developers	Scope of developer contributions
Such solutions will be encouraged. Practically, these will only be delivered by developers if there is sufficient viability in the scheme, or if there is a business case for doing so which benefits the developers.	n/a
Developers to provide new electricity infrastructure on site as required. Existing substation to be relocated and 132kv cable to be rerouted.	n/a
Developers to provide reinforcements on / to the site.	n/a
Developers to provide new water supply facilities on site and will appropriately deal with existing infrastructure.	n/a
Developers to provide new sewers / pumping stations on site and will appropriately deal with existing infrastructure.	n/a
Developers to provide surface water drainage infrastructure on site, in accordance with the Masterplan Framework Plans. Long term maintenance arrangements required. UU may adopt SUDs if of sufficient quality / specification, otherwise developer-provided maintenance is required.	n/a
On site ecological mitigation to be provided by developers, including appropriate response to Nature Improvement Area along Ditton Brook corridor in accordance with the Masterplan and guidance from statutory consultees and Merseyside Environmental Advisory Service.	Only if on site provision is not feasible or sufficient, developer contributions could be sought towards delivery of off-site mitigation.
Likely to take the form of information packs for new residents, potential additional mitigation to be secured through the planning application process.	s106 legal agreement may be needed to secure provision of information packs, potential additional mitigation to be secured through the planning application process.
On site re-provision by developers, to minimum 2-for-1 standard. Long term maintenance of tree stock within development parcels to be considered by developers.	n/a
Developers will manage ground conditions within their own parcels, considering impacts on neighbouring land.	n/a
Public information packs to be sent by developers to all new residents on occupation.	n/a - s106 legal agreement may be needed to secure provision of information packs, no financial contributions considered necessary.

Infrastructure Category	Baseline provision
Noise, vibration and air quality attenuation	The site contains several noise generators, including highways, railways, animal rescue centre and adjacent industrial uses. Highway and railways also generate vibration and air quality issues; hence attenuation is needed.
Social value	Supplementary Planning Document seeks that developer prepare Social Value Strategy to accompany development proposals.
Electric Vehicle Charging Points	Supplementary Planning Document seeks that charging points are provided as part of new development.

Table A.1 **Infrastructure delivery (cont.)**

In-kind provision by developers	Scope of developer contributions
Appropriate attenuation to be provided on site by developers in accordance with the Masterplan Framework Plans and further detailed evidence at the application stage.	n/a
Developers will be expected to prepare a Social Value Strategy, and provide resources to meet the set targets for training, apprenticeships and local employment.	s106 legal agreements can be used to secure outputs from Social Value Strategy if necessary, and to collect financial contributions necessary towards preparation and monitoring of the strategy.
To be delivered by developer in kind as part of design / delivery of new homes; trickle charge infrastructure required.	n/a

Infrastructure Delivery Strategy

A2 In Kind Delivery of Infrastructure within East of Halewood

7.9 As outlined in Table A1, much of the infrastructure required to deliver development at East of Halewood will be provided directly by developers of individual parcels – in kind delivery. Some infrastructure can be provided within specific parcels as per usual development arrangements; however for some infrastructure, developers will also need to work together, across land ownership boundaries, to ensure comprehensive infrastructure delivery.

Parcel Interdependencies

7.10 The East of Halewood site is currently comprised of 19 land ownerships, including Finch Woods, which is not proposed for development and will remain in Council ownership as a public park. The majority of the East of Halewood site is within private ownership, with a significant majority of the site understood by the Council to be under negotiated agreements with developers at the time of publication of this Technical Appendix.

7.11 The scale and comprehensive coverage of the land ownerships and developer control across the site is beneficial in seeking to deliver a connected and integrated development. Given the distribution of land ownerships, the developer agreements associated with them, and the site wide infrastructure required; delivery of coordinated infrastructure across the whole of the site is a key objective. Site wide infrastructure, which crosses parcel ownership boundaries, must be delivered to ensure the integrity of the infrastructure and to fulfil the underpinning principles of comprehensive development for the East of Halewood site.

7.12 Parcel interdependencies arise at the point of transition from parcels under different developer agreements / ownerships / planning permissions within the site. Integration where two or more parcels need to physically connect (for example Avenue Street infrastructure) needs to be seamless and should not prevent or stall delivery of the wider site. This applies equally to smaller development parcels (including those not currently under developer agreement) as it does to the largest parcels.

7.13 The timing of infrastructure delivery where interdependencies exist is also of critical importance. This is particularly important where two or more developers are jointly responsible for delivering a single piece of connecting infrastructure (for example Finch Woods Park Way). The Council will seek to ensure the timely delivery of infrastructure connections through the use of planning conditions and/or legal agreements.

Parcel infrastructure delivery connections

7.14 Examples of parcel infrastructure delivery connections include:

- Access: Connectivity of primary and secondary vehicle access route between parcels;
- Access: Connectivity of strategic walking and cycling routes between parcels;
- Access: Vehicular / pedestrian access to smaller parcels without their own primary or secondary access points to the existing highway (landlocked parcels);
- Flood Risk and Drainage: Integrated sustainable drainage solutions and flood risk mitigation solutions;
- Utilities: Shared approach to delivering utilities easement corridors and necessary relocation of utilities infrastructure;
- Utilities: connectivity of utilities infrastructure between parcels;
- Potential future: dependencies only necessary if additional land parcels come forward for development.
- Utilities: Shared approach to delivering utilities easement corridors / relocation of utilities infrastructure;
- Potential future: dependencies only necessary if additional land parcels come forward for development.

7.15 Table A2 sets out the ownership distribution across the East of Halewood site (according to current Land Registry details), developer agreements (where they are currently known) and their likely infrastructure interdependencies. Figure A1 illustrates the spatial distribution of land ownerships and developer control across the site, along with an illustration of key parcel interdependencies.

Parcel reference / owner	Developer control (where known in March 2020)	Parcel interdependencies for in kind infrastructure
Parcel 1 - Land ownership north of Ditton Brook and West of Greensbridge Lane		
Parcel A	TBC	<ul style="list-style-type: none"> Potential future: connection with Environment Agency required for comprehensive development (depending on whether parcel developed) Potential future: through Parcel A to access land parcel (depending on whether parcel developed)
Environment Agency	TBC	<ul style="list-style-type: none"> Potential future: through Parcel A to access land parcel (depending on whether parcel developed)
Parcel 2 - Land ownership parcels to the north of the Liverpool – Manchester Railway line		
Parcel B	Redrow Homes	<ul style="list-style-type: none"> Access: Avenue Street connection required with Bellway Homes. Access: joint approach to dedicated pedestrian and cycle route through to Bellway land parcel. Flood Risk and Drainage: Delivery of Flood Storage Area within Redrow parcel to establish new development level and surface water drainage – may require joint work with Bellway (on levels) and potential expansion of FSA into UU land. Utilities: work with UU to determine easements required for 36” Trunk Mains. Utilities: connectivity of utilities infrastructure with Bellway Homes.
Parcel C	Bellway Homes	<ul style="list-style-type: none"> Access: Avenue Street connection required with Redrow Homes. Access: joint approach to dedicated pedestrian and cycle route through Redrow land parcel and Network Rail. Utilities: work with Scottish Power to relocate substation to optimum location. Utilities: connectivity of utilities infrastructure with Redrow Homes. Potential future: Existing Heyes Farmhouse and plot retained with potential for future re-development.
Scottish Power (Manweb Plc)	TBC	<ul style="list-style-type: none"> Utilities: need to relocate existing substation
United Utilities Water Ltd (west)	n/a	<ul style="list-style-type: none"> Potential future: if developed, parcel dependent on Redrow and detailed design proposals for Flood Storage Area.
United Utilities Water Ltd (east)	n/a	<ul style="list-style-type: none"> Access: Current access taken from Lower Road (under railway bridge). Work with Bellway and Redrow to determine role and future use of Foul Pump station as part of foul waste management strategy. Flood Risk and Drainage: Potential to incorporate northern portion of land as part of expanded FSA or ecological area. Work with Redrow to determine scope.

Table A.2 East of Halewood parcel interdependencies for in kind infrastructure

Parcel reference / owner	Developer control (where known in March 2020)	Parcel interdependencies for in kind infrastructure
Parcel D	TBC – also contains occupied dwellings and pond	<ul style="list-style-type: none"> • Access: Independent access for small development size only. • Utilities: connectivity of utilities infrastructure with Bellway Homes may be necessary. • Flood Risk and Drainage: connection with Bellway or Redrow may be required to deliver SUDS surface water connections.
Network Rail	n/a	<ul style="list-style-type: none"> • Access: Dedicated pedestrian cycle link through railway arches affects parcel connectivity interdependencies between Bellway parcel (north) and Redrow parcel (south)
Parcel 3: Land ownership parcels to the South of the Liverpool-Manchester Railway and north of Higher Road		
Parcel E	Redrow Homes	<ul style="list-style-type: none"> • Access: Avenue Street (Finch Woods Park Way) and bus route, and Neighbourhood Street, must be linked to Baileys Lane, dependent on connection with Bellway. • Access: joint approach to PROW maintenance with KMBC and Bellway. • Access: joint approach to dedicated pedestrian and cycle route through KMBC land parcel • Utilities: may require joint approach with KMBC and Bellway to achieve relocation of 132kv overhead power cable and Finch Lane easements, and joint approach with Parcel F to ensure easement along railway line maintained. • Utilities: connectivity of utilities infrastructure with Bellway Homes and Parcel F.
Parcel F	TBC	<ul style="list-style-type: none"> • Access: parcel dependent on Redrow as currently land locked. • Utilities: maintain easement with extended through Redrow parcel along railway line. • Utilities: connectivity of utilities infrastructure with Redrow Homes.
Parcel G	TBC	<ul style="list-style-type: none"> • Access: parcel connections required with Redrow for comprehensive development. • Utilities: connectivity of utilities infrastructure with Redrow Homes
Parcel H	Bellway Homes	<ul style="list-style-type: none"> • Access: Avenue Street (Finch Woods Park Way) and bus route, and Neighbourhood Street, must be linked to Lower Road dependent on connection with Redrow. • Access: Avenue Street connection with Miller land required. • Access: joint approach to dedicated pedestrian and cycle route through Finch Woods • Flood Risk and Drainage: connection with Finch Woods drainage ditch required to discharge surface water • Utilities: connectivity of utilities infrastructure with Redrow Homes and Miller Homes.
RSPCA Liverpool Branch	Miller Homes	<ul style="list-style-type: none"> • Access: Avenue street connection with Bellway required • Access: joint approach to dedicated pedestrian and cycle route through Bellway land parcel • Flood Risk and Drainage: connection with other landowner/ developers may be required to deliver surface water connections • Utilities: connectivity of utilities infrastructure with Bellway Homes.

Table A.2 East of Halewood parcel interdependencies for in kind infrastructure (cont.)

Parcel reference / owner	Developer control (where known in March 2020)	Parcel interdependencies for in kind infrastructure
KMBC Finch Woods	n/a	<ul style="list-style-type: none"> Access: parcel dependent on Redrow and Bellway to provide connected pedestrian and cycle links Flood Risk and Drainage: connections to Bellway parcel and drainage ditch along PROW necessary
Adelaide Academy Trust (KMBC freehold)	TBC	<ul style="list-style-type: none"> Potential future: Currently no proposals for redevelopment. Could provide future vehicular and pedestrian / cycle links to Finch Woods.
Parcel 4: Land ownership south of Higher Road		
Hesketh Estate	TBC	<ul style="list-style-type: none"> Access / Maximising development opportunity: parcel dependent on unregistered layby for new vehicular access point. Utilities: parcel dependent on P. Holmes Properties for development easement requirements restrictions on telecommunications mast
Un - registered land (layby)	TBC (Likley devel-oper who delivers Hesketh Estate site)	<ul style="list-style-type: none"> Access / Maximising development opportunity: parcel dependent on Hesketh land
P Holmes Properties Ltd	n/a	<ul style="list-style-type: none"> Utilities / Access: Potential to access site through Hesketh Land and subject to carriageway reconfiguration and junction upgrades at Finch Lane / Higher Road junction. Development potential limited due to size and existing infrastructure.

Table A.2 East of Halewood parcel interdependencies for in kind infrastructure (cont.)

Working within proximity to Network Rail

assets:

7.16 The developer/applicant must ensure that their proposal, both during construction and as a permanent arrangement, does not affect the safety, operation or integrity of the existing operational railway / Network Rail land. There must be no physical encroachment of the proposal onto Network Rail land, no over-sailing into Network Rail air-space and no encroachment of foundations onto Network Rail land and boundary treatments. Any construction works on site and any future maintenance works must be conducted solely within the applicant's land ownership.

7.17 Further regard should be taken when applied to development and proximity to neighbouring trees, to prevent long term damage to the health of trees on Network Rail land so that they do not become a risk to members of the public in the future. See BS 5837:2012 Trees in Relation to Design, Demolition and Construction' for further details. All vegetation on site should be in line with the recommended tree matrix for the reasons outlined in the document.

<http://wcms-internet.corp.ukrail.net/community-relations/trees-and-plants/>

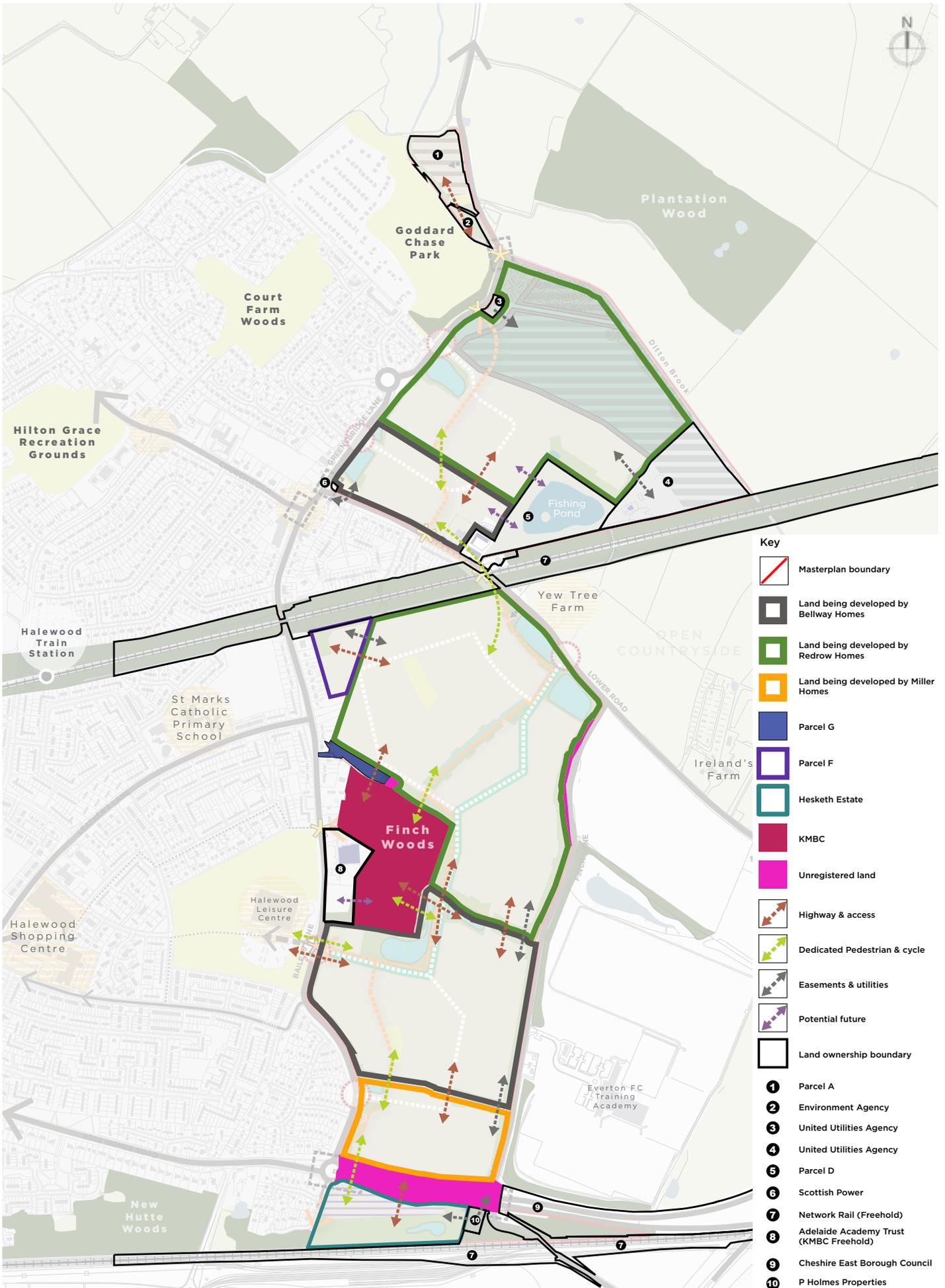


Figure A.2 Parcel interdependencies Plan

Not to scale. © Crown Copyright Knowsley MBC 100017655.2020

Affordable housing

7.18 Knowsley's Local Plan sets a requirement that for the East of Halewood, 25% of the homes provided must be delivered in affordable tenures. It is expected that this housing will be delivered in kind by developers. As explained in section 5 of the East of Halewood Masterplan, and in the Developer Contributions SPD, affordable housing must be fully integrated and not distinguishable from the market housing provided, and must be secured and delivered alongside the market housing. The tenure of affordable housing is affected by recent changes to the National Planning Policy Framework (NPPF), which mean that for this site, at least 10% of the housing must be delivered as affordable home ownership products. The remaining 15% will be delivered as either affordable rent or intermediate housing. The Masterplan also provides guidance on the size mix of affordable housing for the site.

7.19 The affordable housing provided by developers must be provided in perpetuity, including arrangements for recycling of subsidy where appropriate; this will be secured through a legal agreement with the Council.

7.20 A lower proportion of affordable housing will only be permitted in accordance with the provisions of the Local Plan Policy CS27 and the Developer Contributions SPD. Off site provision and/or financial contributions in lieu of provision are not expected for this site.

Off-site highways and walking/cycling improvements

7.21 The Masterplan Framework Plan notes a number of locations where off-site highways and walking/cycling improvements are necessary to make the development of East of Halewood acceptable; Masterplan section 5 describes

the location and scope of the works in further detail. Additional highway improvements on the borough boundary and wider area may also be required.

7.22 The final scope of the off site highways and walking/cycling works necessary to mitigate the impact of the development of the East of Halewood are to be agreed at the planning application stage. Developers will need to work together to undertake further assessment work to establish the works needed and agree these with the Council. Stage 1 Road Safety Audits may also be needed as part of this as determined by the Council at pre-application stage

7.23 As outlined in Table A1, there are two possible delivery mechanisms for the off site works:

- **In Kind delivery:** Developers will also need to propose a delivery plan for the agreed works which includes prioritisation of works, trigger points for commencement of works, and details on phasing/sequencing, in line with residential development phases. These details will need to be agreed with the Council through the use of section 278 agreements which will be between the Council and all the affected developers. Developers would then deliver the works themselves.
- **Developer Contributions:** Developers will need to propose a financial package of sufficient scale to deliver the necessary works as agreed with the Council, with appropriate contingency allowances. The Council would then deliver the works to an agreed programme. Further detail on this option is provided in section A3: Developer Contributions and Roof Tax.

Infrastructure and landscape maintenance

7.24 Developers will be expected to provide for the long term maintenance of infrastructure, including highway verges and trees, public open space and landscaping, to be provided as part of the East of Halewood development. Infrastructure design must be supported by a sustainable management regime, being practical and manageable in the long term, and avoiding creating an unsustainable maintenance burden. Such maintenance regimes, including relevant technical specifications, must be agreed with the Council, and/or any other relevant utilities or infrastructure providers, during the planning process. This is to ensure that infrastructure can be appropriately provided and maintained in perpetuity.

7.25 The majority of infrastructure provided in kind by developers will also need to include suitable maintenance supported by the developers or eventual occupants, for example through the long term use of service charges. Other infrastructure, including most access routes, will be adopted by the Council as public highway; SUDs facilities could in due course be adopted by United Utilities (subject to specification and agreement).

7.26 In addition, it is likely that this process will necessitate the use of developer contributions towards maintenance of selected infrastructure which falls under the remit of the Council or another party to adopt and maintain in the future. The Council will also seek to secure from the developers a dowry of materials used within the highway to ensure availability of resources to undertake consistent repairs in the future. Please see further commentary in Section A3 of this Technical Appendix.

A3 Developer Contributions and “Roof Tax”

7.27 At the time of publication of the East of Halewood Masterplan, Knowsley Council does not have a Community Infrastructure Levy in place. Therefore developer contributions will be secured through the use of legal agreements (including s106 agreements). Where legal agreements are used to secure developer contributions for infrastructure, including financial contributions, this will be in accordance with the Council’s approach set out in Local Plan Policy CS27 and the Developer Contributions SPD, and with the relevant regulatory restrictions.

7.28 The Council acknowledges that the costs of infrastructure items are likely to change over time, and financial contributions will be index-linked, based on the BCIS All-in Tender Price Index. The Council will undertake proactive monitoring of agreements for compliance and to ensure that obligations are met in a timely manner. If circumstances arise whereby the cost of infrastructure delivery was to reduce compared to the time at which a legal agreement was entered into, the Council will undertake to reimburse the relevant party. Changes in agreed costs obligations will be reflected in updated and/or revised s106 legal agreements.

7.29 The Council’s preference is to minimise the number of planning applications associated with the East of Halewood site, and strongly encourages landowners and developers to work together to achieve this; a collaborative approach would be considered positive, particularly where there will be interdependency benefits or efficiencies to be gained by working together.

Roof tax

7.30 Using the information in Table A1, the following Table A3 summarises the elements of infrastructure to be secured through developer contributions, which can be expressed as an equitable cost per property – or a “roof tax”, assuming that 1500 homes are to be completed in East of Halewood.

7.31 The infrastructure provided through this route is that equally attributable to all new residential development within the East of Halewood, regardless of scheme size, securing appropriate development mitigation across a range of infrastructure categories.

7.32 Table A3 contains costs which are based on the latest information available at the time of publication of this Technical Appendix. These costs will be regularly reviewed by the Council and will be updated within future iterations of this Technical Appendix; at this point, index-linked uplifts in costs will also be provided.

Infrastructure category	Infrastructure to be funded through developer contributions roof tax	Approach to informing the roof tax costing	Current total cost	Current cost per property (assuming 1,500 homes)
Primary education	373 primary places to be provided within Halewood primary schools	Advised by the Local Education Authority: 0.3 pupils per home pupil generation rate. Allowance for existing pupil capacity in Halewood primary schools reduces demand to 373 places. National benchmarking data gives cost per place of £14,189.	£5.292m	£3,528
Early years education	58 place nursery to be provided in Halewood	Advised by the Local Education Authority: Cost allowed for new build nursery and childcare facilities, bespoke cost calculated.	£1.250m	£833
Health care	Works to The Halewood Centre to provide additional capacity	Advised by Knowsley Clinical Commissioning Group: Cost allowed for refurbishment of clinical rooms and layout of reception area, bespoke cost calculated	£0.120m	£80
Halewood Leisure Centre – Outdoor sports and walking/cycling improvements	Outdoor sports provision at Halewood Leisure Centre including walking / cycling route and landscaping (and maintenance allowance)	Cost provided by Council Environmental Sustainability Service, bespoke cost calculated based on Masterplan diagrams	£1.308m	£872
Public Open Space tier 1– Finch Woods (includes maintenance)	Public open space works at Finch Woods and NEAP (and maintenance allowance)	Cost provided by Council Environmental Sustainability Service, bespoke cost calculated based on Masterplan diagrams	£1.165m	£777
Public transport	Subsidised bus route	Cost provided by Merseytravel, assuming subsidised bus route needed for five years prior to commercial operation of service (£0.150m/annum). This is a worst case scenario and is likely to be reduced either due to shortening of period of necessary subsidy or through alternative commercial arrangement.	£0.750m	£500
Social Value Strategy (preparation and monitoring)	Social Value Strategy preparation and monitoring	Cost per dwelling taken from adopted Social Value in New Development SPD. Agreed lower cost per dwelling than standard approach due to size of development with Fusion 21.	£0.105m	£70
TOTAL			£9.990m	£6,660

Table A.3 East of Halewood Roof Tax details – March 2020

Off-site Highways and Walking/Cycling Improvements

7.33 As noted in section A2 of this document, there is an option for off site highways and walking / cycling improvements to be facilitated through developer contributions rather than in kind delivery by developers. Under this approach, the Council would deliver the identified works using financial contributions from developers, inclusive of appropriate contingency allowances (reflecting the liabilities placed on the Council in undertaking the delivery role) and fees, to an agreed programme.

7.34 This would effectively add an additional “Roof Tax” category to Table A2. Given that the scope of the necessary works is to be finalised (with reference to the scope identified in the Masterplan), along with the detailed junction and route design, it is not currently possible to include an indicative cost within the Roof Tax schedule. This Technical Appendix will be updated with further details on this matter, as necessary.

Timing of Roof Tax payments

7.35 The timing of roof tax payments are to be agreed at the planning application stage and formalised within s106 legal agreements. The timing of payments will be aligned to trigger points within the development process, such as the completion or occupation of a particular number of homes.

Additional Commuted Sums

7.36 As outlined in section A2, there is the possibility of further financial contributions to the Council and/or other public sector partners to allow for the long term maintenance of infrastructure that has been provided as part of new development, including that initially provided by developers but for which they will not be directly maintaining in the longer term, and which would not be maintained via another route, such as service charges. This could include (but is not necessarily limited to):

- Maintenance of street trees and verges within the adopted highway;
- Maintenance of street lighting and traffic signage within the adopted highway.
- Maintenance of on plot open spaces / other green infrastructure.

7.37 Further details will be agreed at the planning application stage, with the trigger point to be agreed with the Council.

Masterplan viability appraisal

7.38 The process of preparing the East of Halewood Masterplan has been informed by the Council’s assessment of the economic viability of delivering the whole site in accordance with policy and Masterplan requirements, on a commercial basis. Through this process, the Council sought assurance that the Masterplan asks were deliverable, accounting for reasonable assumptions about development costs, landowner return and sales values.

7.39 A viability appraisal has been undertaken on the final East of Halewood Masterplan, by the Council’s retained advisors, Keppie Massie. This process involved input from the majority landowners and developers for the

site, ensuring that the process accounted for reasonable assumptions and information about abnormal costs within the scheme.

7.40 This process concluded that the Masterplan overall should be deliverable on a commercial basis, and there is not any justification for reducing the Masterplan asks overall in response to viability concerns.

7.41 It is therefore expected that the majority of development parcels within East of Halewood will be able to deliver “policy compliant” schemes; this means that they will be able to deliver the necessary infrastructure on site and off site, developer contributions (including currently anticipated roof tax) and the requisite levels of on-site affordable housing, while still making an appropriate developer profit and landowner return. On this basis, it is generally not expected that developers will seek to justify delivering less than policy compliant scheme at the planning application stage.

7.42 Notwithstanding this, the viability appraisal process has revealed that some parts of the East of Halewood site are likely to face a higher infrastructure burden and/or abnormal costs than others, primarily due to the impact of parcel-specific constraints such as flood zone or the need to relocate existing utilities. The Council does not propose to establish an equalisation framework for individual landowners and developers to account for this. However parties will be expected to collaborate to bring forward their own parcels on a commercial basis.

7.43 **Planning Application Viability Submissions**

7.44 If at the planning application stage, developers submit viability appraisals to the Council to seek to justify a non-policy compliant scheme, this will be reviewed and considered by the Council’s officers and the Council’s retained viability advisors, in accordance with the process outlined in the Local Plan and Developer Contributions SPD.

7.45 It is considered very unlikely that development that does not adequately mitigate its impact, including making necessary contributions to the roof tax, will be approved. The Council will however consider the case for a reduction in affordable housing contributions in exceptional cases where justified by economic viability evidence.

A4 Planning Application Submissions

Pre application

7.46 Applicants are strongly encouraged to engage with the Council at an early stage of the development process, and to share details of their proposed schemes with the Council and with each other, as soon as possible. They should prepare pre-application materials which:

- Reflect the requirements of the adopted policy framework including the East of Halewood SPD and approved Masterplan;
- Set out a detailed development structure based on further site survey work and analysis;
- Communicate a clear response to the Framework Plans in this document;
- Respond to the Design Guide elements of the Masterplan, including character area guidance and the urban design framework;
- Provides a clear infrastructure delivery plan, delivery sequence and development trajectory;
- Demonstrates how comprehensive development will be achieved, proposing key interfaces and dependencies with neighbouring parcels;
- Identifies cumulative impacts that require assessment as part of the Environmental Impact Assessment process.

7.47 In return, the Council commits to providing proactive and helpful advice to shape planning application submissions, including seeking early views from internal and external consultees. Officers will also help applicants to finalise their supporting document submissions (see section A4 below).

7.48 Further details regarding the pre application process are available on the Council's website:

<https://www.knowsley.gov.uk/residents/building-and-planning/make-a-planning-application/get-planning-application-advice>

Public consultation and Design review

7.49 Applicants are encouraged to undertake effective and meaningful consultation to inform their planning application submissions; this includes public and stakeholder consultation. Proposals for such activities should be agreed with the Council in accordance with the Statement of Community Involvement.

7.50 The Council recommends the use of Places Matter, the North West RIBA-sponsored design review panel, and would be happy to host and facilitate design review sessions. These sessions are considered beneficial particularly at the early stage of the planning process, where the panel can offer helpful guidance.

7.51 Further details are available on the Places Matter website:

<https://www.architecture.com/working-with-an-architect/places-matter>

Environmental Impact Assessment development

7.52 Each applicant will need to prepare a detailed EIA for their red line boundary, and a high level EIA covering the whole of the East of Halewood site, assuming it would be completed in accordance with the East of Halewood Masterplan. This must also consider possible cumulative effects from other nearby schemes. The Council will be happy to provide detailed Scoping Advice for EIA submissions.

Planning Application submissions – preliminary list

Application documents

- Planning application form and appropriate fee
- Description of development and schedule of uses
- Parameter plans (subject to EIA)
- Design principles (summary of Design and Access Statement)
- Proposed Heads of Terms for S106 agreement (see below)
- EIA conclusions and mitigation measures
- Implementation proposals

Supporting information - documents

- Planning Statement
- Design and Access Statement
- Environmental Statement and non-technical summary*
- Transport Assessment*
- Travel Plan*
- Affordable Housing Statement
- Arboricultural Impact Assessment/Tree Survey*
- Ecological Appraisal*
- Archaeological and Heritage Assessment*
- Noise Assessment*
- Air Quality Assessment*
- Vibration Impact Assessment*
- Flood Risk Assessment*
- Sustainable Drainage Strategy (including management strategy)*
- Hydrogeological Risk Assessment (for development within Source Protection Zone 1 and 2)*

- Land Contamination Assessment *
- Ground Conditions Assessment (including Coal Mining Risk Assessment)*
- Construction Management Plan*
- Utilities Statement
- Energy, Waste and Water Strategies*
- Statement of Community Involvement
- Infrastructure Delivery Plan for the application site
- Energy/Sustainability Statement*
- Equality and Diversity Impact Assessment
- Crime Impact Statement
- Social Value Strategy (supported by Fusion 21)
- Health Impact Assessment
- Economic Statement*
- Viability Appraisal (if needed in exceptional cases)

**the marked requirements shall be provided, where necessary, within an Environmental Impact Assessment.*

Supporting information – plans and drawings:

- Location plan
- Plan of the Application Site
- Plan of the Site in the context of the wider East of Halewood site (illustrating interdependencies, adjoining site levels, highway connections, etc.)
- Phasing Plan
- Green Infrastructure and Public Open Space Plan and Strategy
- Soft Landscaping scheme, including management strategy
- Materials layout
- Hard Landscaping Scheme
- Boundary Treatment Plan
- Street Scenes/CGI's
- Proposed elevations of all house types
- Proposed floor plans of all house types
- Topographical survey
- Proposed site levels as necessary to demonstrate proposed drainage and vehicular/pedestrian access arrangements would be suitable and in accordance with design standards
- Vehicle swept path analysis on proposed site layout as per the Masterplan

7.53 All plans shall be provided to a recognised scale that is clearly identified on the plan itself and be accompanied by scale bar to ensure accuracy.

Local Validation checklist

7.54 At the time of publication of this document, a local validation checklist is available on the Council's website, following a period of public consultation:

https://www.knowsley.gov.uk/knowsleycouncil/media/Documents/Validation-Checklist-Nov-2018-Draft-for-Consult_2.pdf

7.55 This document should be reviewed alongside the preliminary list of application documents set out above.

Environmental Permitting Regulations

7.56 Environmental Permitting (England and Wales) Regulations 2016, a permit may be required from the Environment Agency for any proposed works or structures, in, under, over or within eight metres of the top of the bank of Ditton Brook. A permit is separate to and in addition to any planning permission granted.

7.57 Further details and guidance are available on the GOV.UK website:

<https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>

Draft Section 106 Agreements – Heads of Terms Further resources

7.58 To ensure the expediency of determining a valid planning application, it is advised that the developer submits draft Heads of Terms proposals along with planning applications.

7.59 The Section 106 Heads of Terms templates must include the following details:

- Details of the proposals;
- Details of what the Agreement is for;
- Suggested trigger points for contributions and proposals for any staged payments
- Title deeds and Land Registry information;
- Names and addresses of the interested parties;
- Name and address and contact details of the instructed solicitor;
- Details of viability evidence to be submitted (where necessary).

7.60 If applicants are concerned that meeting the requirements of the Masterplan, including developer contributions required, could negatively affect the financial viability of their proposals, they are advised to submit an economic viability assessment during the pre-application stage, thus providing an opportunity to assess viability evidence early in the process. More information can be found within the Developer Contributions SPD.

7.61 The Council will also shortly make available a draft Section 106 agreement with parties interested in developing within the East of Halewood SUE site.'

United Utilities offer pre application service:

Developer Services – Wastewater

Tel: 03456 723 723

Email: WastewaterDeveloperServices@uuplc.co.uk

Website:

<http://www.unitedutilities.com/builder-developer-planning.aspx>

Developer Services – Water

Tel: 0345 072 6067

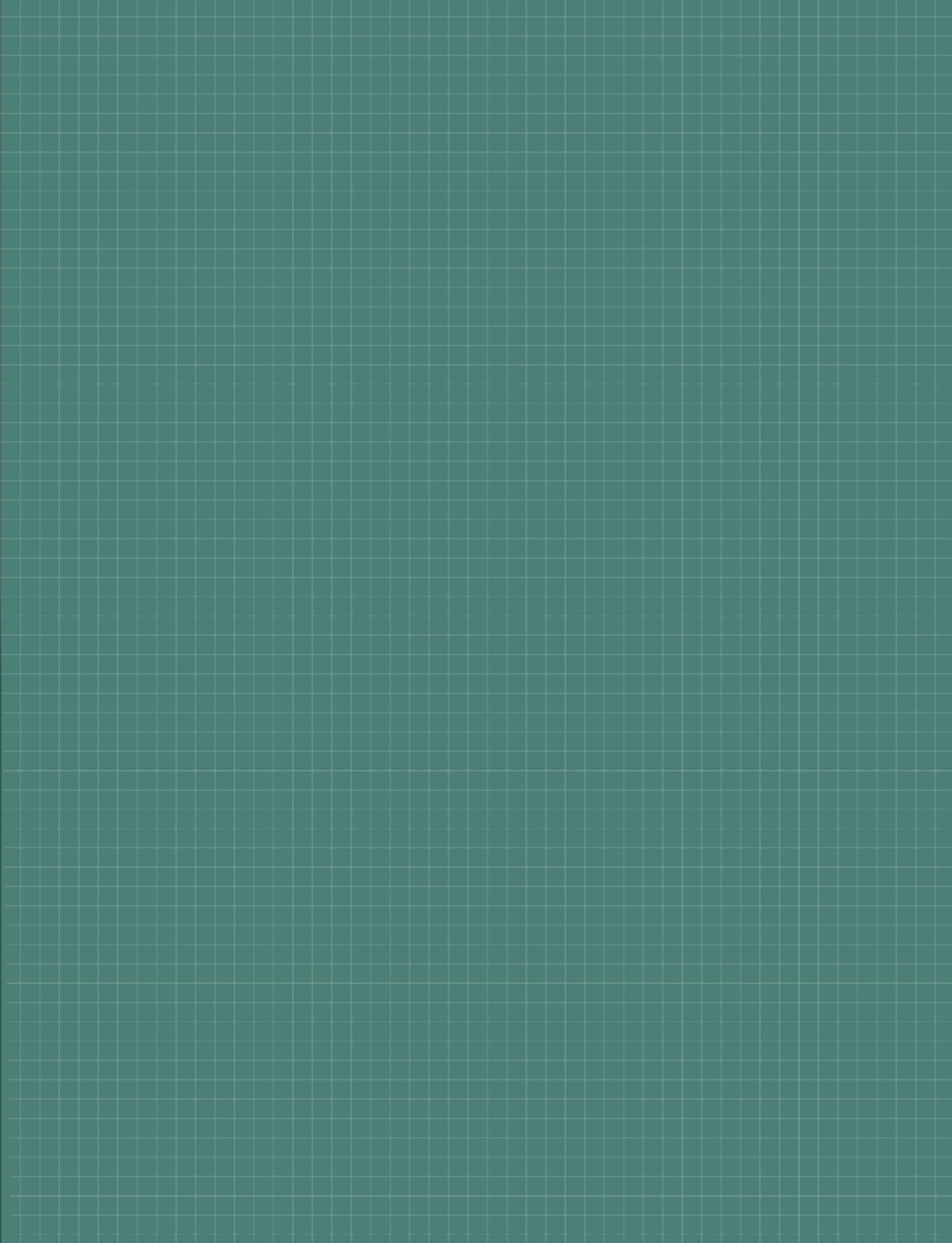
Email: DeveloperServicesWater@uuplc.co.uk

Website:

<http://www.unitedutilities.com/newwatersupply.aspx>

› Appendix B

Tree Planting



Appendix B Tree Planting

Species	Common Name	Soil Volume (m³)	Avenues	Neighbourhood Streets (incl. front gardens)	Local Streets / Lanes	Private Gardens	Public Open Space
Community Core							
Acer campestre 'Elsrijk'	Field Maple	17		•			
Acer platanoides 'Columnare'	Norway Maple	17		•			
Aesculus hippocastanum	Horse Chestnut	30					•
Amelanchier lamarckii	Snowy Mespilus	8				•	
Alnus incana 'Aurea'	Golden Alder	12					•
Betula utilis Jacquemontii	West Himalayan Birch	12			•		
Carpinus betulus 'Frans Fontaine'	Hornbeam	12		•			
Liquidambar styraciflua 'Festival'	Sweet Gum	17	•	•			
Liriodendron tulipifera	Tulip Tree	17					•
Malus 'Evereste'	Crab Apple	12				•	
Malus 'Floribunda'	Crab Apple	12				•	
Prunus 'Accolade'	Cherry	15				•	•
Prunus avium 'Plena'	Cherry	15				•	
Prunus sargentii 'Rancho'	Cherry	15			•		
Prunus x hillieri 'Spire'	Cherry	15		•	•		
Pyrus calleryana 'Chanticleer'	Callery Pear	12			•		
Pyrus communis 'Beech Hill'	Pear	12				•	
Pyrus salicifolia 'Pendula'	Willow-Leaved Pear	8				•	
Quercus ilex	Holm Oak	30					•
Sorbus aria 'Lutescens'	Whitebeam	15					•
Sorbus aucuparia 'Asplenifolia'	Rowan	12			•		
Tilia x europaea 'Euchlora'	Lime	17	•				

Species	Common Name	Soil Volume (m³)	Avenues	Neighbourhood Streets (incl. front gardens)	Local Streets / Lanes	Private Gardens	Public Open Space
Halewood Lanes							
Acer campestre 'Elsrijk'	Field Maple	17		•			
Aesculus hippocastanum	Horse Chestnut	30					•
Amelanchier lamarckii	Snowy Mespilus	8				•	

Alnus incana 'Aurea'	Golden Alder	12					•
Betula utilis Jacquemontii	West Himalayan Birch	12			•		
Carpinus betulus 'Frans Fontaine'	Hornbeam	12		•			
Liquidambar styraciflua 'Festival'	Sweet Gum	17	•	•			
Malus 'Floribunda'	Crab Apple	12				•	
Prunus 'Accolade'	Cherry	15				•	•
Prunus avium 'Plena'	Cherry	15				•	
Prunus x hillieri 'Spire'	Cherry	15		•	•		
Pyrus calleryana 'Chanticleer'	Callery Pear	12			•		
Pyrus communis 'Beech Hill'	Pear	12				•	
Pyrus salicifolia 'Pendula'	Willow-Leaved Pear	8				•	
Quercus ilex	Holm Oak	30					•
Sorbus aria 'Lutescens'	Whitebeam	15					•
Sorbus aucuparia 'Asplenifolia'	Rowan	12			•		
Tilia x europaea 'Euchlora'	Lime	17	•				

Species	Common Name	Soil Volume (m³)	Avenues	Neighbourhood Streets (incl. front gardens)	Local Streets / Lanes	Private Gardens	Public Open Space
Plantation View							
Acer campestre 'Elsrijk'	Field Maple	17		•			
Alnus glutinosa	Alder	12		•	•		•
Amelanchier lamarckii	Snowy Mespilus	8				•	
Carpinus betulus 'Frans Fontaine'	Hornbeam	12		•			
Fagus sylvatica	Beech	17					•
Malus 'Evereste'	Crab Apple	8				•	
Malus 'Floribunda'	Crab Apple	8				•	
Prunus 'Accolade'	Cherry	15				•	
Prunus avium 'Plena'	Cherry	15				•	
Prunus x hillieri 'Spire'	Cherry	15		•			
Pyrus calleryana 'Chanticleer'	Callery Pear	12		•			
Pyrus communis 'Beech Hill'	Pear	12				•	
Pyrus salicifolia 'Pendula'	Willow-Leaved Pear	8				•	

Quercus ilex	Holm Oak	30					•
Sorbus aria 'Lutescens'	Whitebeam	15					•
Sorbus aucuparia 'Asplenifolia'	Rowan	12			•		
Tilia × europaea 'Euchlora'	Lime	17	•				

Species	Common Name	Soil Volume (m³)	Avenues	Neighbourhood Streets (incl. front gardens)	Local Streets / Lanes	Private Gardens	Public Open Space
Woodland Edge							
Acer platanoides 'Columnare'	Norway Maple	17		•			
Amelanchier lamarckii	Snowy Mespilus	8				•	
Alnus incana 'Aurea'	Golden Alder	12					•
Betula utilis Jacquemontii	West Himalayan Birch	12			•		
Carpinus betulus 'Frans Fontaine'	Hornbeam	12		•			
Liquidambar styraciflua 'Festival'	Sweet Gum	17		•			
Malus 'Floribunda'	Crab Apple	12				•	
Prunus 'Accolade'	Cherry	15				•	•
Prunus avium 'Plena'	Cherry	15				•	
Pyrus calleryana 'Chanticleer'	Callery Pear	15			•		
Quercus ilex	Holm Oak	30					•
Sorbus aria 'Lutescens'	Whitebeam	15					•
Tilia × europaea 'Euchlora'	Lime	17	•				

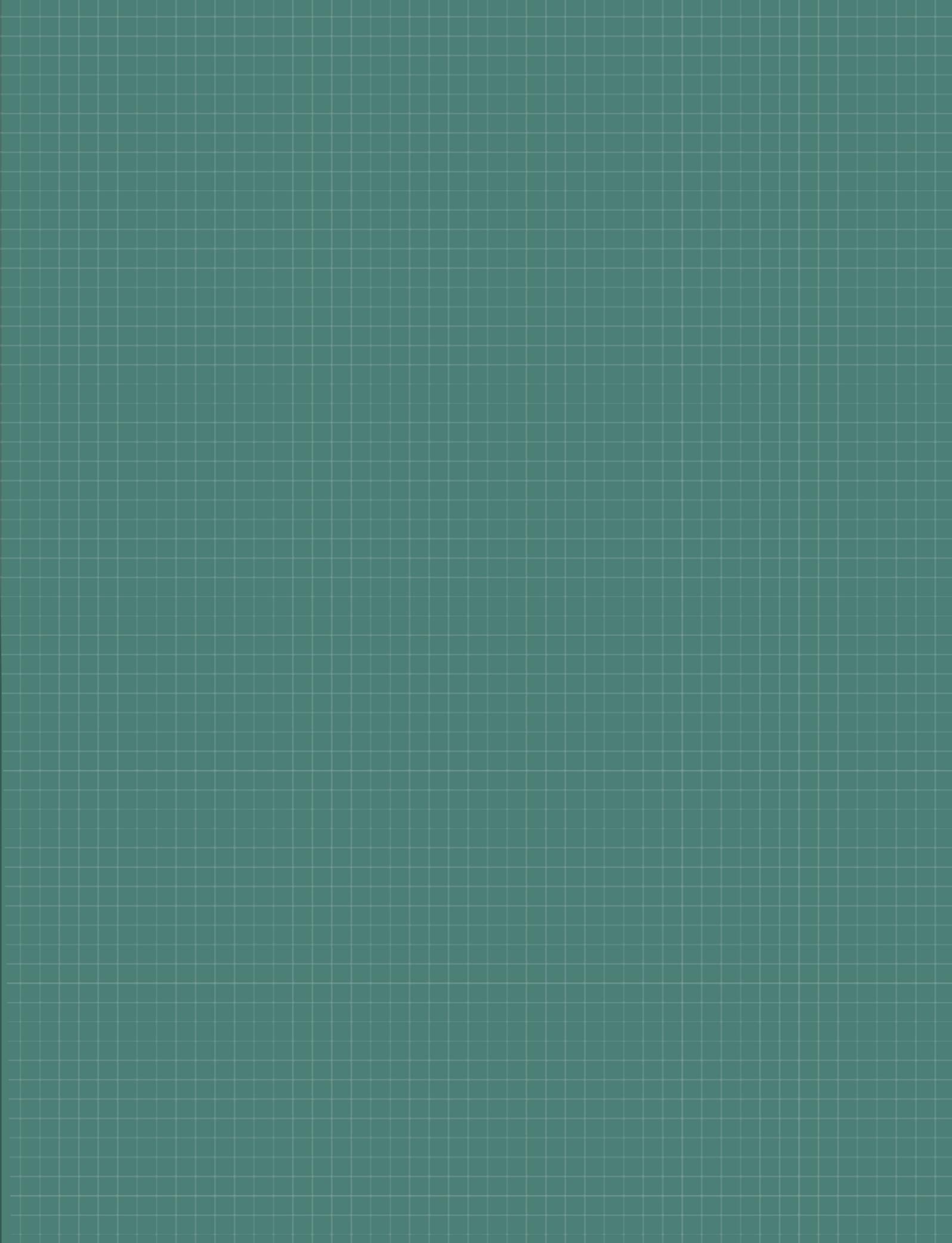
Species	Common Name	Soil Volume (m³)	Avenues	Neighbourhood Streets (incl. front gardens)	Local Streets / Lanes	Private Gardens	Public Open Space
Country Edge							
Acer campestre 'Elsrijk'	Field Maple	17		•			
Aesculus hippocastanum	Horse Chestnut	30					•
Alnus glutinosa	Alder	12		•	•		•
Betula utilis Jacquemontii	West Himalayan Birch	12			•		
Carpinus betulus 'Frans Fontaine'	Hornbeam	12		•			
Crataegus laevigata	Midland Hawthorn	8				•	

Crataegus prunifolia	Broad-leaved Cockspur Thorn	8				•	
Fagus sylvatica	Beech	17					•
Malus 'Evereste'	Crab Apple	12				•	
Prunus 'Accolade'	Cherry	15				•	
Prunus avium 'Plena'	Cherry	15				•	
Prunus x hillieri 'Spire'	Cherry	15		•			
Pyrus communis 'Beech Hill'	Pear	15			•		
Pyrus salicifolia 'Pendula'	Willow-Leaved Pear	8				•	
Quercus robur	English Oak	30					•
Sorbus aria 'Magnifica'	Whitebeam	15		•			
Sorbus aucuparia 'Asplenifolia'	Rowan	12			•		
Tilia x europaea 'Euchlora'	Lime	30	•				

Species	Common Name	Soil Volume (m³)	Neighbourhood Streets (incl. front gardens)	Local Streets /Lanes	Private Gardens	Public Open Space
Higher Road Approach						
Acer platanoides 'Columnare'	Norway Maple	17	•			
Amelanchier lamarckii	Snowy Mespilus	8			•	
Betula utilis Jacquemontii	West Himalayan Birch	12		•		•
Carpinus betulus 'Frans Fontaine'	Hornbeam	12	•			
Liquidambar styraciflua 'Festival'	Sweet Gum	17	•			
Liriodendron tulipifera	Tulip Tree	17				•
Malus 'Floribunda'	Crab Apple	12			•	
Pinus sylvestris 'Norska'		22				•
Prunus sargentii 'Rancho'	Cherry	15		•		
Prunus x hillieri 'Spire'	Cherry	15	•			
Pyrus calleryana 'Chanticleer'	Callery Pear	15		•		
Sorbus aria 'Lutescens'	Whitebeam	15	•			•
Tilia x europaea 'Euchlora'	Lime	17				

› Appendix C

Hedge Planting



Appendix C Hedge Planting

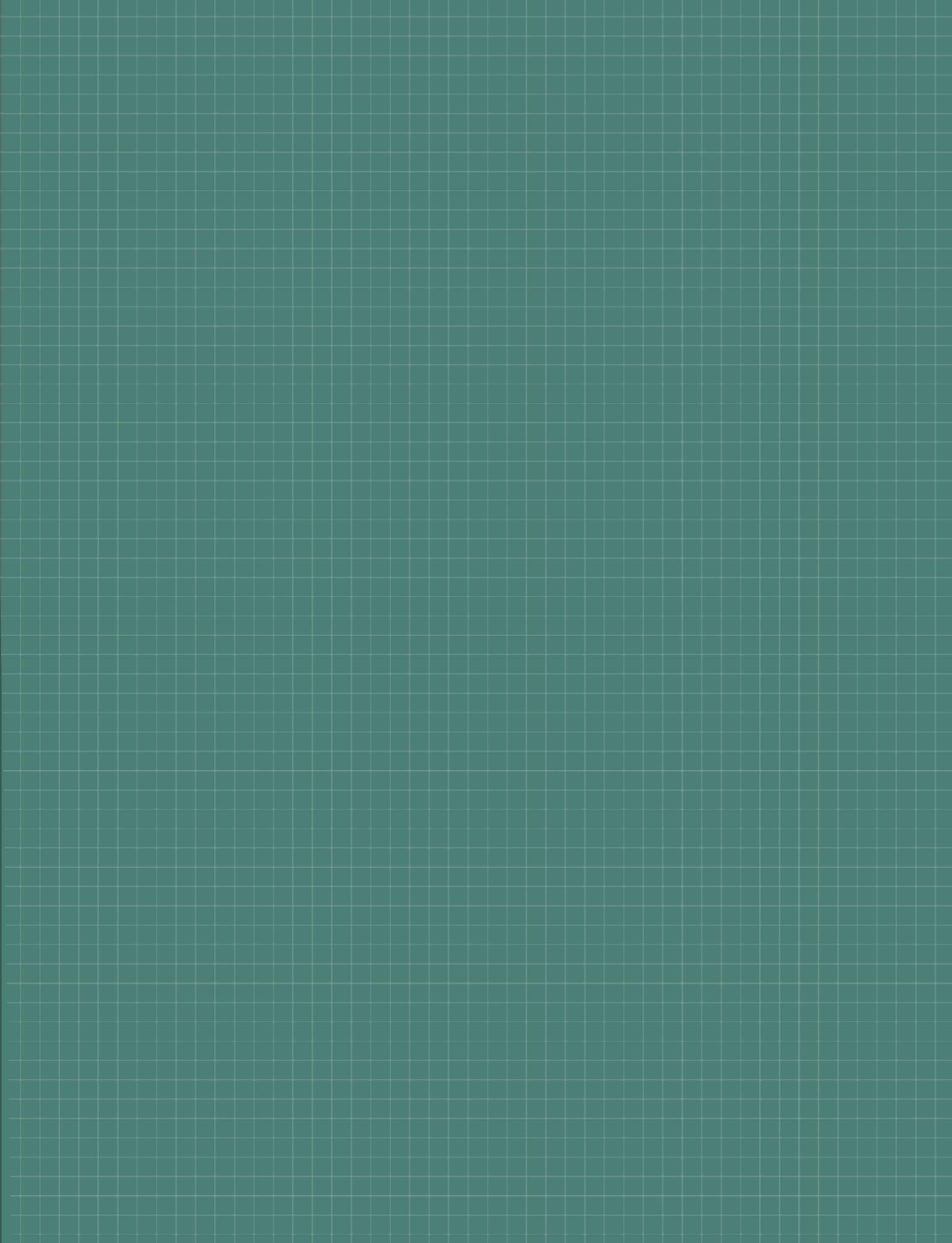
Species	Common Name	Local Streets /Lanes					
		Community Core	Halewood Lanes	Plantation View	Woodland Edge	Country Edge	Higher Road Approach
<i>Berberis ottawensis</i> 'Superba'	Barberry	.	.				.
<i>Choisya ternata</i>	Mexican Orange Blossom	.					
<i>Euonymus japonicus</i>	Spindle				.		
<i>Ribes sanguineum</i>	Flowering Currant			.		.	
<i>Escallonia</i> 'Iveyi'	Escallonia	.	.				
<i>Fagus sylvatica</i> 'Purpurea'	Copper Beech				.		
<i>Hypericum</i> 'Hidcote'	St John's Wort	.					
<i>Taxus baccata</i>	Yew			.		.	
<i>Lonicera nitida</i>	Wilson's Honeysuckle		.		.		.
<i>Lavandula angustifolia</i>	Lavender					.	
<i>Pyracantha coccinea</i> 'Red Column'	Red Firethorn					.	
<i>Pittosporum tenuifolium</i> 'Abbotsbury Gold'	New Zealand Pittosporum	.					
<i>Prunus lusitanica</i>	Portuguese Laurel
<i>Sarcococca confusa</i>	Sweet Box	.	.				.
<i>Spirea nipponica</i> 'Snowmound'	Tosa Spirea	.					

Species	Common Name	Percentage Mix
Native Hedge Mix		
<i>Acer campestre</i>	Field Maple	20%
<i>Corylus avellana</i>	Hazel	15%
<i>Crataegus monogyna</i>	Hawthorn	50%
<i>Ilex aquifolium</i>	Holly	5%
<i>Prunus spinosa</i>	Blackthorn	10%

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› Appendix D

Shrubs, Perennials & Bulbs



Species	Private Gardens	Public Open Space / Amenity Space	Verges
Community Core			
<i>Alchemilla mollis</i>	•	•	
<i>Berberis thunbergii</i>	•		•
<i>Bergenia</i> 'Schneekissen'		•	
<i>Brachyglottis</i> 'Sunshine'	•		
<i>Calamagrostis x acutifolia</i> 'Karl Foester'	•	•	
<i>Carex oshimensis</i> 'Everillo'	•	•	
<i>Cistus x skanbergii</i>	•		•
<i>Cornus canadensis</i>	•		
<i>Cornus kousa</i>	•		
<i>Cotinus</i> 'Grace'	•		
<i>Cotinus coggygria</i> 'Young Lady'	•		
<i>Deschampsia cespitosa</i> 'Bronzeschleier'	•	•	
<i>Dicentra spectabilis</i> 'Alba'	•		
<i>Euonymus fortunei</i> 'Harlequin'	•	•	•
<i>Euonymus japonicus</i> 'Green Rocket'	•		•
<i>Geraneum macrorrhizum</i>	•	•	
<i>Hakonechloa macra</i>		•	
<i>Hebe</i> 'Red Edge'	•		
<i>Hebe</i> 'Caledonia'	•		
<i>Hebe salicifolia</i>	•		
<i>Heuchera</i> 'Blackbird'		•	
<i>Lavandula angustifolia</i> 'Arctic Summer'		•	
<i>Lavandula angustifolia</i> 'Vera'	•		
<i>Lonicera pileata</i>		•	•
<i>Miscanthus nepalensis</i>	•		
<i>Pachysandra terminalis</i> 'Green Carpet'		•	
<i>Perovskia atriplicifolia</i> 'Blue Spire'	•	•	
<i>Rosmarinus officinalis</i>	•	•	
<i>Rudbeckia fulgida</i> 'Goldstrum'	•	•	
<i>Salix purpurea</i>		•	
<i>Salvia nemerosa</i> 'Cardonna'	•		
<i>Salvia officinalis</i>	•		
<i>Salvia officinalis</i> 'Purpurascens'	•	•	
<i>Santolina incana</i>	•	•	
<i>Santolina virens</i>	•	•	
<i>Stipa tenuissima</i>	•		
<i>Verbena bonariensis</i>		•	
<i>Vinca minor</i> 'Alba'		•	

Seasonal Bulbs:			
Allium 'Globemaster'		•	
Allium schenoprasum		•	
Camassia leichtinii		•	
Crococsmia x crocosmiflora 'George Davidson'		•	
Crocus speciosus		•	•
Tulipa 'Spring Green'		•	•
Tulipa 'White Valley'		•	•

Species	Private Gardens	Public Open Space / Amenity Space	Verges
Halewood Lanes			
Alchemillia mollis	•	•	
Berberis thunbergii	•		•
Bergenia 'Schneekissen'		•	
Carex oshimensis 'Everillo'	•	•	
Cistus x skanbergii	•		•
Cornus canadensis	•		
Cornus kousa	•		
Cotinus 'Grace'	•		
Cotinus coggygria 'Yong Lady'	•		
Dicentra spectabilis 'Alba'	•		
Euonymus fortunei 'Harlequin'	•	•	•
Euonymus japonicus 'Green Rocket'	•		•
Geraneum macrorrhizum	•	•	
Hebe 'Red Edge'	•		
Hebe 'Caledonia'	•		
Hebe salicifolia	•		
Heuchera 'Blackbird'		•	
Lavandula angustifolia 'Arctic Summer'		•	
Lavandula angustifolia 'Vera'	•		
Lonicera pileata		•	•
Pachysandra terminalis 'Green Carpet'		•	
Perovskia atriplicifolia 'Blue Spire'	•	•	
Rosmarinus officinalis	•	•	
Rudbeckia fulgida 'Goldstrum'	•	•	
Salix purpurea		•	
Salvia nemerosa 'Cardonna'	•		
Salvia officinalis	•		
Salvia officinalis 'Purpurascens'	•	•	
Santolina incana	•	•	
Santolina virens	•	•	
Stipa tenuissima	•		
Verbena bonariensis		•	

Vinca minor 'Alba'		•	
Seasonal Bulbs:			
Allium 'Globemaster'		•	
Allium schenoprasum		•	
Camassia leichtinii		•	
Crocsmia x crocosmiflora 'George Davidson'		•	
Crocus speciosus		•	•
Tulipa 'Spring Green'		•	•
Tulipa 'White Valley'		•	•

Species	Private Gardens	Public Open Space / Amenity Space	Verges
Plantation View			
Alchemillia mollis	•		
Amelanchier laevis	•		
Asplenium nidus	•		
Cistus x skanbergii	•		•
Cornus alba 'Sibirica'	•	•	
Cornus sanguinea 'Midwinter Fire'		•	
Corylus avellana	•	•	
Cytisus scoparius		•	
Dicentra spectabilis 'Alba'	•		
Dryopteris erythrosora 'Prolifica'	•		
Dryopteris felix-mas		•	
Euonymus alatus	•		
Euonymus europaeus		•	
Geraneum macrorrhizum	•		
Hamamelis x intermedia	•		
Hebe 'Red Edge'	•		
Hebe 'Sapphire'	•		
Hedera helix		•	
Heuchera 'Blackbird'	•		
Lamium purpureum		•	
Lavandula angustifolia	•		
Polystichum setiferum		•	
Phlomis fruticosa		•	
Pulmonaria 'Sissinghurst White'	•	•	
Rosa arvensis		•	
Rosa canina		•	•
Salix alba 'Britzensis'		•	
Salix lanata		•	
Salix purpurea	•		
Syringa meyeri 'Palibin'	•		•
Viburnum opulus		•	•
Vinca minor	•		

Seasonal Bulbs:			
Anemone nemerosa		•	
Convallaria majalis		•	
Fritillaria meleagris		•	•
Galanthus nivalis		•	•
Ranunculus ficaria		•	

Species	Private Gardens	Public Open Space / Amenity Space	Verges
Country Edge			
Alchemillia molis	•		
Amelanchier laevis	•		
Asplenium nidus	•		
Cistus x skanbergii	•		•
Cornus alba 'Sibirica'	•	•	
Cornus sanguinea 'Midwinter Fire'		•	
Corylus avellana	•	•	
Cytisus scoparius		•	
Dicentra spectabilis 'Alba'	•		
Dryopteris erythrosora 'Prolifica'	•		
Dryopteris felix-mas		•	
Euonymus alatus	•		
Euonymus europaeus		•	
Geraneum macrorrhizum	•		
Hamamelis x intermedia	•		
Hebe 'Red Edge'	•		
Hebe 'Sapphire'	•		
Hedera helix		•	
Heuchera 'Blackbird'	•		
Lamium purpureum		•	
Lavandula angustifolia	•		
Polystichum setiferum		•	
Phlomis fruticosa		•	
Pulmonaria 'Sissinghurst White'	•	•	
Rosa arvensis		•	
Rosa canina		•	•
Salix alba 'Britzensis'		•	
Salix lanata		•	
Salix purpurea	•		
Syringa meyeri 'Palibin'	•		•
Viburnum opulus		•	•
Vinca minor	•		
Seasonal Bulbs:			
Anemone nemerosa		•	
Convallaria majalis		•	
Fritillaria meleagris		•	•

Galanthus nivalis		•	•
Ranunculus ficaria		•	

Species	Private Gardens	Public Open Space / Amenity Space	Verges
Woodland Edge			
Alchemillia mollis	•		
Berberis thunbergii	•		•
Bergenia 'Schneekissen'	•	•	
Calamagrostis x acutifolia 'Karl Foester'		•	
Carex oshimensis 'Everillo'		•	
Corylus avellana		•	
Cornus canadensis	•		
Cornus kousa	•		
Cotinus 'Grace'	•		
Cotinus coggygria 'Young Lady'	•		
Deschampsia cespitosa 'Bronzeschleier'		•	
Dryopteris felix-mas		•	
Euonymus europaeus		•	
Euonymus fortunei 'Harlequin'	•		•
Euonymus japonicus 'Green Rocket'	•		•
Geraneum macrorrhizum	•		
Hakonechloa macra		•	
Hamamelis x intermedia		•	
Hebe 'Red Edge'	•		
Hebe 'Caledonia'	•		
Hebe 'Sapphire'	•		
Hedera helix		•	
Lamium purpureum		•	
Lavandula angustifolia 'Arctic Summer'		•	
Lavandula angustifolia 'Vera'	•		
Lonicera pileata		•	•
Perovskia atriplicifolia 'Blue Spire'		•	
Phlomis fruticosa		•	
Polypodium vulgare		•	
Rudbeckia fulgida 'Goldstrum'	•	•	
Salvia nemerosa 'Cardonna'	•		
Salvia officinalis	•		
Vinca minor 'Alba'	•	•	
Seasonal Bulbs:			
Anemone blanda		•	
Crocus minimus 'Spring Beauty'		•	•
Galanthus nivalis		•	

Hyacinthoides non-scripta		•	
Narcissus 'Pueblo'		•	•

Species	Private Gardens	Public Open Space / Amenity Space	Verges
Higher Road Approach			
Berberis thunbergii	•		•
Bergenia 'Schneekissen'		•	
Euonymus fortunei 'Harlequin'	•	•	•
Euonymus japonicus 'Green Rocket'	•		•
Hebe 'Red Edge'	•		
Hebe salicifolia	•		
Lonicera pileata		•	•
Pachysandra terminalis 'Green Carpet'		•	
Salvia officinalis 'Purpurascens'	•	•	
Santolina incana	•	•	
Santolina virens	•	•	
Vinca minor 'Alba'		•	
Seasonal Bulbs:			
Crocus speciosus		•	•
Narcissus 'Pueblo'		•	•
Tulipa 'White Valley'		•	•

› Appendix E

Wildflower Meadow

Appendix E Wildflower Meadow

Species			
Woodland & Hedgerow Borders	Meadow Verges & Open Space	SuDS Swales & Detention Basins	Amenity Grass
Shaded areas mix:	Butterfly & Honeybee Mix:	Wetland & Ponds Mix:	Species Rich Lawn Mix:
Stachys officinalis (0.2%)	Agrostis capillaris (5.0 %)	Leontodon autumnalis (0.3%)	Leontodon autumnalis (0.5%)
Hyacinthoides non scripta (2.0%)	Festuca rubra commutata (15.0%)	Pulicaria dysenterica (0.1%)	Lotus corniculatus (0.5%)
Ajuga reptans (0.1%)	Centaurea nigra (1.0%)	Ranunculus repens (2.0%)	Medicago lupulina (1.0%)
Chrysanthemum segetum (1.0%)	Vicia sativa (0.6%)	Cynosurus Cristatus (20.0%)	Agrostis capillaris (5.0%)
Agrostemma githago (1.8%)	Chrysanthemum segetum (1.9%)	Succisa pratensis (0.1%)	Hypochaeris radicata (0.2%)
Cynosurus Cristatus (15.0%)	Papaver rhoeas (1.5%)	Lotus uliginosus (0.5%)	Festuca rubra commutate (10%)
Digitalis purpurea (0.1%)	Centaurea cyanus (1.4%)	Sanguisorba officinalis (0.2%)	Centaurea nigra (2.0%)
Alliaria petiolate (0.8%)	Anthriscus sylvestris (0.2%)	Lycopus europaeus (0.2%)	Cerastium fontanu (0.2%)
Stellaria holostea (0.1%)	Primula veris (0.1%)	Juncus inflexus (1.5%)	Rumex acetosa (0.5%)
Galium mollugo (2.0%)	Taraxacum officinale (0.5%)	Eupatorium cannabinum (0.2%)	Primula veris (0.1%)
Torillia japonica (0.5%)	Oenothera biennis (0.5%)	Lythrum salicaria (1.0%)	Agrostis stolonifera (2.5%)
Arum maculatum (0.2%)	Dipsacus fullonum (0.5%)	Caltha palustris (0.2%)	Ranunculus repens (2.3%)
Filipendula ulmaria (0.5%)	Knautia arvensis (0.5%)	Ranunculus acris (3.8%)	Taraxacum officinale (0.3%)
Lychnis flos cuculi (0.1%)	Digitalis purpurea (0.1%)	Filipendula ulmaria (0.5%)	Linum usitatissimum (1.0%)
Allium ursinum (0.5%)	Alliaria petiolate (0.5%)	Leucanthemum vulgare (2.0%)	Galium verum (1.25%)
Silene dioica (3.0%)	Trisetum flavescens (1.0%)	Lychnis flos cuculi (0.1%)	Lolium perenne (2.5%)
Festuca rubra litoralis (25.0%)	Centaurea scabiosa (1.0%)	Poa trivialis (15.0%)	Ranunculus acris (2.25%)
Festuca rubra rubra (10.0%)	Anthyllis vulneraria (0.8%)	Sanguisorba minor (2.8%)	Trifolium pratense (2.0%)
Myrrhis odorata (2.0%)	Lotus corniculatus (1.0%)	Festuca rubra litoralis (25.0%)	Plantago lanceolate (1.0%)
Festuca arundinacea (25.0%)	Malva moschata (0.5%)	Festuca arundinacea (10.0%)	Leontodon hispidus (0.5%)
Silene alba (25.0%)	Leucanthemum vulgare (1.2%)	Phleum bertolonii (5.0%)	Poa trivialis (5.0%)
Geum urbanum (1.0%)	Silene dioica (1.5%)	Deschampsia caespitose (5.0%)	Prunella vulgaris (1.0%)
Poa nemoralis (0.5%)	Trifolium pratense (1.0%)	Alisma plantago aquatica (0.3%)	Festuca ovina (20.0%)
Teucrium scorodonia (0.5%)	Festuca ovina (44.0%)	Iris pseudacorus (2.2%)	Festuca rubra litoralis (12.5%)
Iris pseudacorus (1.6%)	Festuca rubra litoralis (15.0%)	Rhinanthus minor (2.0%)	Scabiosa columbaria (0.2%)
	Scabiosa columbaria (0.2%)		Poa pratensis (5.0%)
	Silene alba (1.5%)		Festuca rubra rubra (15.0%)
	Trifolium repens (1.0%)		Phleum bertolonii (2.5%)
	Achillea millefolium (1.0%)		Trifolium repens (2.0%)
			Teucrium scorodonia (0.5%)
			Achillea millefolium (0.5%)
			Rhinanthus minor (0.2%)

› Appendix F

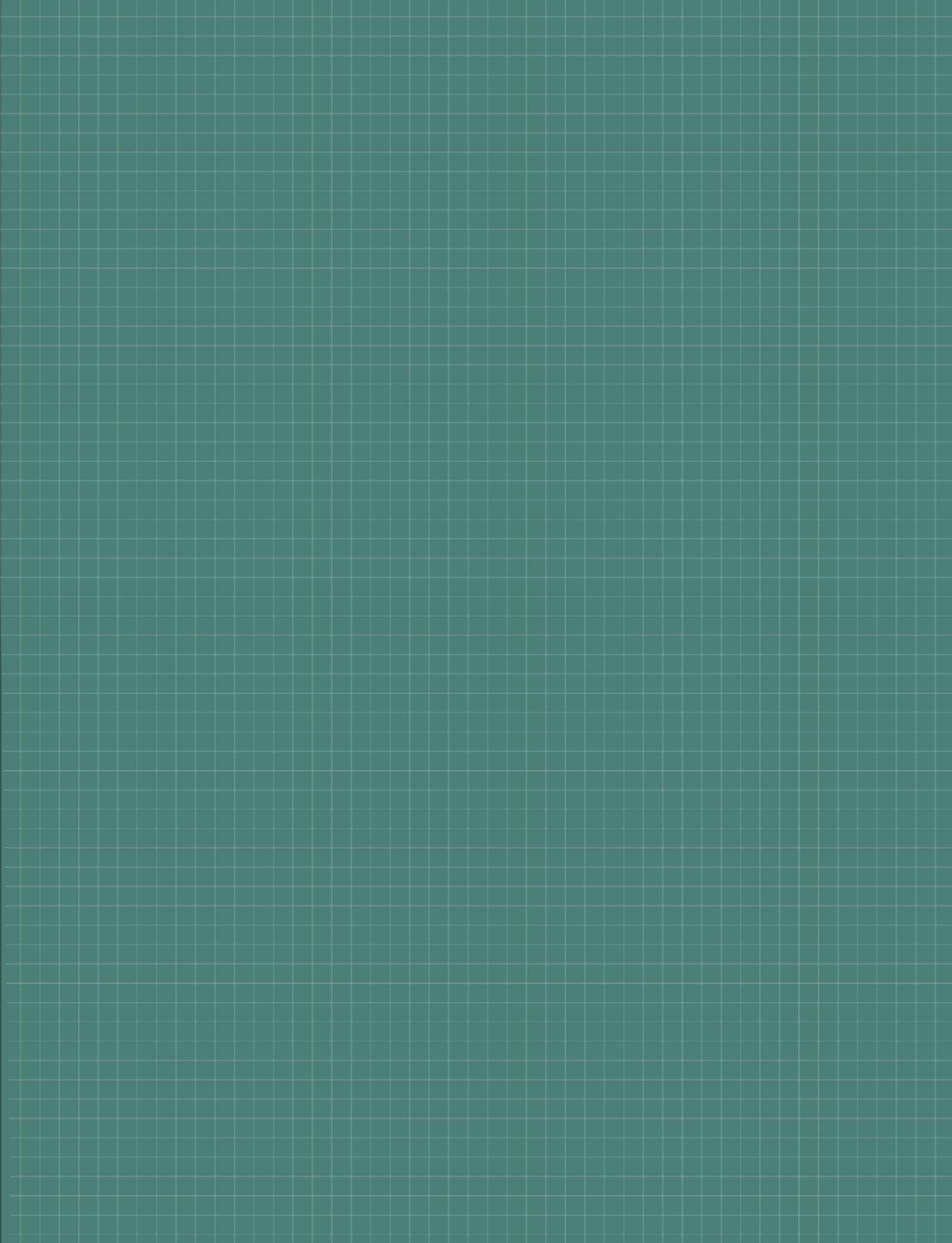
Aquatic & Emergent Planting

Appendix F Aquatic & Emergent Planting

Species
Ponds
<i>Angelica sylvestris</i>
<i>Caltha palustris</i>
<i>Carex acutiformis</i>
<i>Carex flacca</i>
<i>Carex paniculate</i>
<i>Carex pendula</i>
<i>Filipendula ulmaria</i>
<i>Geum rivale</i>
<i>Iris pseudocorus</i>
<i>Juncus effusus</i>
<i>Juncus inflexus</i>
<i>Lychnis flos-cuculi</i>
<i>Lythrum salicaria</i>
<i>Mentha aquatica</i>
<i>Myosotis scorpioides</i>
<i>Nymphaea alba</i>
<i>Persicaria bistorta</i>
<i>Phragmites australis</i>
<i>Ranunculus aquatilis</i>
<i>Ranunculus flammula</i>
<i>Stachys palustris</i>
<i>Typha latifolia</i>
<i>Veronica beccabunga</i>

› Appendix G

Maintenance Schedule



Appendix G Maintenance Schedule

YEARS 1-5												
Activity	J	F	M	A	M	J	J	A	S	O	N	D
Trees												
Formative / remedial pruning												
Refirming trees												
Replacement planting												
Stakes / supports												
Tree guards and grilles												
Pruning / deadwooding												
Avoid nesting birds/bat roosting												
Hedges												
Pruning – formal hedges												
Pruning – native hedges												
Apply fertiliser												
Maintain around hedge base												
Check guards, ties and stakes												
Check supporting fencing												
Replace dead or dying stock												
Water (as required)												
Shrubs, Perennials & Bulb Planting												
Edging / trimming of shrub beds												
Weed control												
Formative / remedial pruning												
Replace failed or dead planting												
Maintain bark mulch												
Water (as required)												
Deadheading (timing dependent on species)												
Amenity Grass												
Litter pick and amenity grass cutting												
Edge trimming												
Apply fertiliser												
Remove arisings												
Repair damaged areas												
Water (as required)												
Wildflower Meadow												
Wildflower meadow cutting												
Water (as required)												
Ponds & Ditches												
General maintenance visits												
Cutting / removal aquatic plants												
Maintain safety equipment and signage												
Swales & Detention Basins												
Litter picking / grass cutting												
Meadow grass cutting												
Vegetation management												
Sediment and dead growth												
Inspecting												

Wildlife Refuges & Nesting Boxes												
Inspect, replace/repair												

YEARS 5-25

Activity	J	F	M	A	M	J	J	A	S	O	N	D
Trees												
Replacement planting												
Stakes / supports												
Tree guards and grilles												
Pruning / deadwooding												
Avoid nesting birds/bat roosting												
Hedges												
Pruning – formal hedges												
Pruning – native hedges												
Apply fertiliser												
Maintain around hedge base												
Replace dead or dying stock												
Water (as required)												
Shrubs, Perennials & Bulb Planting												
Edging / trimming of shrub beds												
Weed control												
Replace failed or dead planting												
Maintain bark mulch												
Water (as required)												
Deadheading (timing dependent on species)												
Amenity Grass												
Litter pick and amenity grass cutting												
Edge trimming												
Apply fertiliser												
Remove arisings												
Repair damaged areas												
Water (as required)												
Wildflower Meadow												
Wildflower meadow cutting												
Water (as required)												
Ponds & Ditches												
General maintenance visits												
Cutting / removal aquatic plants												
Maintain safety equipment and signage												
Swales & Detention Basins												
Litter picking / grass cutting												
Meadow grass cutting												
Vegetation management												
Sediment and dead growth												
Inspecting												
Wildlife Refuges & Nesting Boxes												
Inspect, replace/repair												

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