

Knebworth Neighbourhood Plan

2019 – 2031



SUBMISSION March 2021

Please consider the environment before printing this document

Table of Contents

1 Introduction	8
1.1 Purpose of a Neighbourhood Plan	8
1.2 Knebworth Neighbourhood Plan Area and Qualifying Body	8
1.3 National and Local Planning Policy	8
1.4 Process of preparing the Neighbourhood Plan	10
1.5 Community Engagement	11
1.6 The Neighbourhood Plan Evidence Base	11
1.7 Technical Assistance (AECOM)	11
2 Knebworth Parish	12
2.1 History of Knebworth	12
2.2 Knebworth Today	16
2.3 Local Statistics	17
3 Vision and Objectives	18
3.1 Vision	18
3.2 Objectives	18
3.3 Objectives mapped to Policies	19
3.4 Policies and Policies Map	19
4 Policies – Development Strategy	20
4.1 Introduction	20
4.2 Policy KBDS1 Retention of Separation Between Settlements	20
4.3 Policy KBDS2 Density of Housing Development	21
5 Policies - Local Economy	22
5.1 Introduction	22
5.2 Policy KBLE1 New Businesses	22
5.3 Policy KBLE2 Rural businesses	23
5.4 Policy KBLE3 Village Centre and Existing Businesses	24
5.5 Policy KBLE4 Community Businesses	26
5.6 Policy KBLE5 Home Working	27
5.7 Policy KBLE6 Telecommunications	27
6 Policies - Built Environment	28
6.1 Introduction	28
6.2 Policy KBBE1 Housing Mix	30
6.3 Policy KBBE2 Sustainable buildings	31

6.4	Policy KBBE3 Accessibility and adaptability	32
6.5	Policy KBBE4 Design	33
6.6	Policy KBBE5 Masterplanning and Placemaking	35
6.7	Policy KBBE6 Site KB1 Land at Deards End	36
6.8	Policy KBBE7 Site KB2 Land off Gipsy Lane	37
6.9	Policy KBBE8 Site KB4 Land east of Knebworth	38
7	Policies - Wellbeing	39
7.1	Introduction	39
7.2	Policy KBW1 Community Facilities and Services	40
7.3	Policy KBW2 Local Green Spaces	45
7.4	Policy KBW3 Recreational Green Spaces	49
7.5	Policy KBW4 Valued Community Facilities	51
7.6	Policy KBW5 Allotments	53
8	Policies -Schools	54
8.1	Introduction	54
8.2	Policy KBS1 Existing Primary School	54
8.3	Policy KBS2 NHDC Proposed New Primary School	55
8.4	Policy KBS3 Pre-School	55
8.5	Policy KBS4 KB4 School Site	56
9	Policies - Environment and Flooding	57
9.1	Introduction	57
9.2	Policy KBEF1 Biodiversity	58
9.3	Policy KBEF2 Environmental Pollution	61
9.4	Policy KBEF3 Energy conservation	64
9.5	Policy KBEF4 Flooding and Drainage	64
9.6	Policy KBEF5 Important Views and Character Areas	67
9.7	Heritage Assets	78
9.8	Policy KBEF6 Non-designated Heritage Assets	80
10	Policies - Traffic, Transport and Parking	82
10.1	Introduction	82
10.2	Policy KBT1 Sustainable Modes of Travel	83
10.3	Policy KBT2 Traffic Impact	84
10.4	Policy KBT3 On Street Parking	86
10.5	Policy KBT4 'High Street' (London Road) Traffic Issues	87
10.6	Policy KBT5 Bus Routes	88

11 Policies – Implementation	90
11.1 Introduction	90
11.2 Policy KBI1 Spending Priorities	90
Appendix A Policies Map	91
Appendix B Objectives Mapped to Policies	93
Appendix C Community Facilities and Services	96
Appendix D Local Green Space Assessment	97
Appendix E Action Plan	98
Appendix F Abbreviations and Glossary	101
Appendix G Acknowledgements	106
Appendix H Wildlife Sites	107
Appendix I Flora and Fauna and Examples of SuDS	108
Appendix J Surface Water Flood Risk Maps	113
Appendix K AECOM Design Guidelines	114
Appendix L Bibliography	121

Table of figures

Figure 1 Knebworth Neighbourhood Plan Designated Area	8
Figure 2 Knebworth Railway Station (left) and Cottage in Old Lane (right)	12
Figure 3 Pondcroft Road single storey homes (left) Lutyens designed shops (right).....	13
Figure 4 Spacious green Stockens Green	14
Figure 5 Oakfields Avenue (left) and Wadnell Way east of Gun Road Gardens (right)	14
Figure 6 Properties in Sayer Way (left) and Woodstock, Rialto Estate (right)	15
Figure 7 Kerr Close, 2 nd Wimpey Estate (left) and Constance Place (right).....	16
Figure 8 Village appears green and open (left), C21 st Green spaces and trees (right).....	17
Figure 9 Strategic gap between Knebworth and Stevenage (left) and Bragbury End (right) .	21
Figure 10 Parking in village centre.....	25
Figure 11 Percentage projected population increase (2014-2039)	29
Figure 12 Designing in renewable energy generation at time of build (Bragbury End)	32
Figure 13 Issues to be avoided. Examples from Hemel Hempstead of garages clearly not used to park cars (left) and Great Ashby with pavements obstructed by cars (right).....	33
Figure 14 Aerial view of KB1 (middle ground).....	36
Figure 15 Site KB2 Policy KBBE7	37

Figure 16 Site KB4 Policy KBBE8	38
Figure 17 New GP Surgery (left) and Library (right)	41
Figure 18 St Martin's Church (left) and St Mary's Church (right)	43
Figure 19 Trinity Church (left) and St Thomas More Church (right).....	43
Figure 20 Knebworth Cemetery, Gun Road Gardens	44
Figure 21 Watton Road Recreation Grounds pond and wildlife	45
Figure 22 Watton Road Recreation Grounds, one of five lime avenues (left) and Jubilee Walk (right)	46
Figure 23 Watton Road Recreation Grounds, children's play area (left) and floodlit tennis courts (right)	46
Figure 24 Watton Road Recreation Grounds, Knebworth Bowls Club (left) and Pavilion(right).....	47
Figure 25 LGS2 Cherry Close Green	48
Figure 26 The Green, Stockens Green	48
Figure 27 St Martin's Green, London Road.....	48
Figure 28 Allotments, Watton Road.....	49
Figure 29 Lytton Fields play space (left) and King George V play space (right)	50
Figure 30 Amenity Land, Meadway (left) and Amenity Land, Haygarth (right).....	51
Figure 31 The Royal British Legion (left) and The Scout Hut and land (right)	52
Figure 32 The Lytton Arms PH (left) and The Station PH (right).....	53
Figure 33 Allotments between Watton Road and St Martin's Road	53
Figure 34 Knebworth Primary and Nursery School now (left) in 1912 (right)	54
Figure 35 Mature hedges and trees in Gypsy Lane from Orchard Way junction.....	60
Figure 36 Oak tree and unmown verge (Old Lane, south end) (left) and Entrance to Old Lane (south) (right)	60
Figure 37 Mature hedgerows and trees lining London Road (left) and B197 towards Stevenage (from Deards End Lane) (right)	61
Figure 38 Flooding in London Road.....	65
Figure 39 Flooding in Orchard Way (left) and Scout Hut in Gun Lane (right)	66
Figure 40 Water table outside Lytton Arms (2014) (left) and evidence of drainage improvements on Gipsy Lane	66
Figure 41 Looking south from the plant nursery towards Knebworth.....	68
Figure 42 Looking past Oakfields Avenue towards Bragbury End (B197).....	69
Figure 43 Looking south east from Oakfields Road and Oakfields Avenue junction	70
Figure 44 Looking into Knebworth from west	71
Figure 45 Looking from Old Lane to eastern parish boundary	71

Figure 46 Swangleys Lane leading into Knebworth to the left and Old Lane to the right	72
Figure 47 London Road looking north	73
Figure 48 St Martin’s Church (from B197)	73
Figure 49 Gypsy Lane looking east over Knebworth towards Datchworth	74
Figure 50 View east towards Rustling End (from layby on B656 – Codicote to Hitchin)	74
Figure 51 Variation in design between Picton Houses	75
Figure 52 Picton Houses in winter	76
Figure 53 Picton Houses along Oakfields Road	76
Figure 54 Original buildings. The small building in the image on the left is a Grade II listed granary, which can be seen in both of the views along Park Lane	77
Figure 55 Tree-lined descent towards Knebworth Railway Station and the station.....	77
Figure 56 Park Lane looking west from the railway station	77
Figure 57 Knebworth Village Hall (left) and Trinity Church (right)	78
Figure 58 Grade II* buildings - Knebworth House and Milepost opposite Trussell’s butchers.	79
Figure 59: 23 Station Road (left) & Trussell's Butchers 143 London Road (right)	81
Figure 60 Pedestrian congestion under railway bridge.....	86
Figure 61 Conflict in the ‘high street’ between vehicles and pedestrians (left) and between delivery vehicles, buses and cars (right)	87
Figure 62 Queuing traffic coming from Stevenage (left) and in the ‘high street’ (right).....	88

1 Introduction

1.1 Purpose of a Neighbourhood Plan

A Neighbourhood Plan (sometimes called a Neighbourhood Development Plan) is a way of helping local communities to influence the planning of the area in which they live and work. It can be used to develop a shared vision for their neighbourhood, identify and protect important local green spaces and influence what new buildings should look like. It also offers the opportunity to develop a multi-modal approach towards sustainable transport.

1.2 Knebworth Neighbourhood Plan Area and Qualifying Body

Knebworth Parish Council (KPC) is the Qualifying Body for Knebworth Parish. At the Parish Council meeting on 9th March 2016 the KPC voted (Minute 8) to commence the development of a Neighbourhood Plan and to register the whole of Knebworth Parish as the designated area for Knebworth Neighbourhood Plan (See Figure 1).

At the Parish Council meeting on 13th April 2016 the KPC discussed (Minute 8.1) the proposed North Hertfordshire District Council Local Plan (NHDCLP) and agreed that it should try to influence development in the parish through a neighbourhood plan. The Council approved the terms of reference of the Steering Committee for the Neighbourhood Plan.

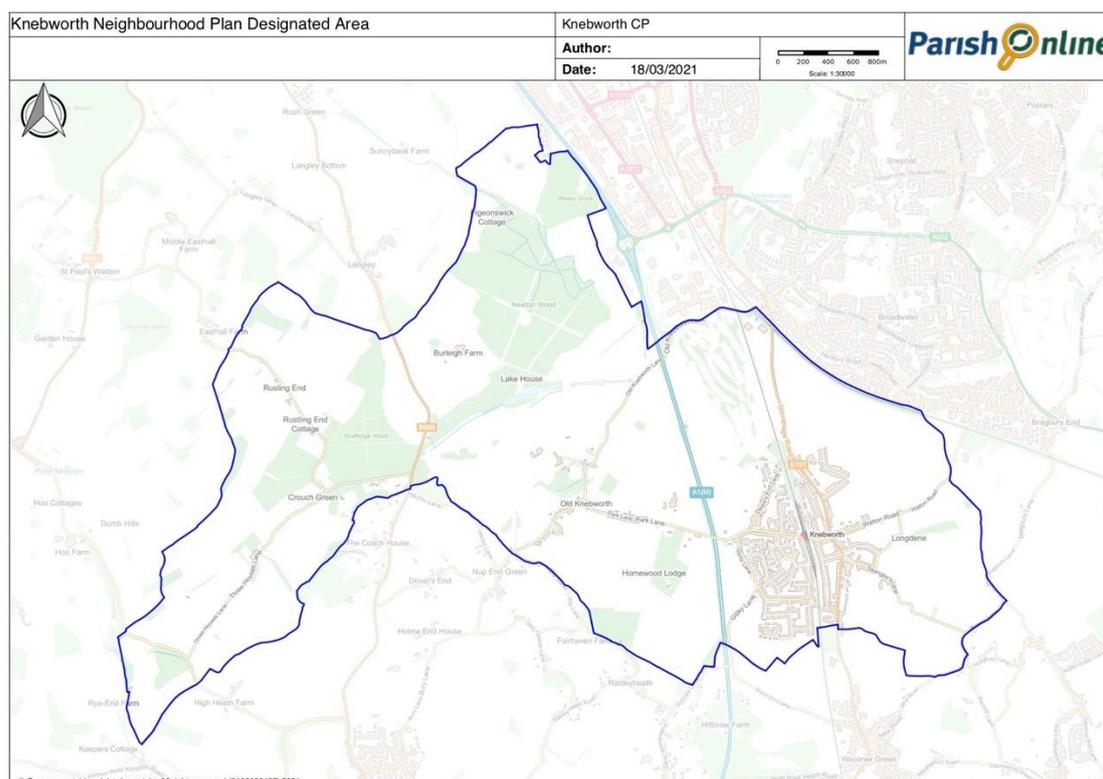


Figure 1 Knebworth Neighbourhood Plan Designated Area

1.3 National and Local Planning Policy

There are several key pieces of legislation relating to planning and development including the Town and Country Planning Act 1990. The Localism Act 2011 is also relevant, as it provides a statutory regime for neighbourhood planning, and allows qualifying bodies, (such as parish councils), to influence more directly the way in which their locality is developed.

The Neighbourhood Planning (General) Regulations 2012 set out the legal process by which this can be achieved. Essentially, Neighbourhood Plans must be in line with higher level planning policy; and support strategic planning policies set out in Local Plans – in our case, that of North Herts District Council (NHDC). (Neighbourhood Plans must also comply with European Regulations on strategic environmental assessment and habitat.)

Through their Neighbourhood Plan, local people can set policies for their area on issues relating to new development and, once the Plan has been through the legal process and formally made, it becomes part of the strategic Local Plan for the area - and must be used by local planning authorities when making decisions on development proposals.

The Government's 2019 National Planning Policy Framework (NPPF) (NPPF, Feb 2019) sets out its planning policies for England, and how these are expected to be applied. It is based on the fundamental principle that the purpose of planning is to help achieve sustainable development, i.e. growth which ensures that better lives for us does not mean worse lives for future generations; and which reflects the fact that our natural environment is essential to our wellbeing.

In launching the NPPF, The Rt. Hon. Greg Clark MP (then Minister for Planning) said "Planning must be a creative exercise in finding ways to enhance and improve the places in which we live our lives".

The NPPF's key concept is the involvement of local people and their accountable councils, through producing their own distinctive local and neighbourhood plans, reflecting the needs and priorities of their communities. Consequently, in developing the Knebworth Parish Neighbourhood Plan we have taken the NPPF principles into account and considered not only the current needs of our parishioners, but also likely future needs – particularly given the information and preferred options for development contained in the Consultation Paper published by our accountable council in December 2014: "North Hertfordshire District Council Local Plan 2011 – 2031."

When considering positively the housing needs of our community, and the potential options for future development within Knebworth Parish, we have borne in mind the three mutually dependent dimensions of sustainable development, which require the planning system to perform a number of roles. These are:

- An economic role: contributing to building a strong, responsive and competitive economy, by encouraging development to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;
- A social role: supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and
- An environmental role: contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

Alongside these, we have considered Knebworth Parish's particular characteristics such as location, historic environment, population, amenities, parking facilities, infrastructure etc;

and the views of its parishioners on the key issues impacting on life in our community and future development within it.

In doing so we believe we have produced a balanced summary of those issues - and positive proposals to address them, as set out later in this Plan. By working in partnership with stakeholders we aim to achieve creative improvements to, and better future development of, our parish while protecting and enhancing its character and environment.

References to NHDCLP relate to North Hertfordshire District Council Local Plan (Proposed Submission Version October 2016), unless otherwise stated. At the time of Submission, the North Hertfordshire District Council Local Plan 2011-2031 (the proposed NHDCLP) is still with the Planning Inspector, awaiting completion of the examination process.

In the proposed NHDCLP, the sites for the Local Housing Allocations will be taken out of the Green Belt. The owners of the land within these identified areas made their land available for development through the District Council's Call for Sites Process.

Knebworth Parish Council (KPC) do not own any of this land. The only way that KPC can influence the nature of any proposed development, is through discussion with landowners/developers, and through the planning process, which will be revised and refined by the proposed NHDCLP, and additionally, through the Neighbourhood Plan, which can refine the NHDCLP further, in response to the wishes of the local community.

If the proposed NHDCLP is adopted before this Knebworth Neighbourhood Plan (KNP) Examination is concluded, then this KNP may be revised to accommodate changes in the adopted NHDCLP. Until that time, however, the KNP will include relevant and applicable details from the proposed NHDCLP, (on the presumption that the proposed NHDCLP will be adopted with its current form and content), so that those proposed policies can be acted on.

In the proposed NHDCLP, the settlement area of Knebworth village is to be extended into Green Belt, both to the East and West of the current village. Although there was considerable opposition to this incursion into Green Belt from Knebworth residents, NHDC felt that the requirement for housing in North Herts outweighed those objections and the proposed development areas remain within the proposed NHDCLP.

This KNP exists to provide detailed policies regarding all potential development within the Knebworth Parish Area, including the areas defined in the proposed NHDCLP.

1.4 Process of preparing the Neighbourhood Plan

A Neighbourhood Plan Steering Committee was established chaired by a member of the KPC, and made up of other members of the KPC, the Parish Clerk, a local District Councillor and a number of volunteers from the local community. Subsequently the Steering Committee has evolved to have more volunteers including the chairman.

The preparation of the plan can be broken down into 4 broad stages:

- Survey of all households in the parish to establish the priorities for the local community. The Steering Committee established a vision for the parish.
- Establishment of 6 sub-committees to research the key areas identified by the survey. Each group researched its own topic, engaged with the community where appropriate and undertook surveys to establish a vision and a set of objectives.
- Each group developed a set of objectives to support their vision and objectives and collated evidence to support those policies.

- All objectives, policies and evidence were brought together to form a cohesive plan.

1.5 Community Engagement

Throughout the process there has been continuous engagement with the local community as set out in the Consultation Statement. An overview of the consultations is set out below.

- The process started with a survey of all households in the parish.
- There have been 2 Open Days at different stages of the process. The first was to inform the community about the plan and our vision. The second was to enable the community to review the draft policies.
- There have been presentations to the public at all Annual Parish Meetings to keep the community informed about progress of the plan.
- There have been regular updates in the Parish Newsletter and in the newsletters of adjacent parishes.
- The committee has engaged with the two main landowners whose land is proposed for development within the parish in the NHDCLP.
- There has been consultation with local bodies such as the police, the doctors' surgery and the Patient Participation Group (PPG), the school, the local Scouts and Guides, local businesses, the Football Club and other groups and societies who were perceived to have a view on developments within the parish.

1.6 The Neighbourhood Plan Evidence Base

The evidence for this plan has been gathered from feedback obtained from the local community as detailed above. It has also been taken from various British Standards, advisory documents and Statutory Documents all of which are referenced where appropriate in the plan. Additional evidence has been borrowed from the NHDCLP evidence base and from the 2011 census.

1.7 Technical Assistance (AECOM)

This KNP includes a number of references to a report from the worldwide design, planning and construction company, AECOM.

As part of the KNP development process, KPC asked for support from the government agency, Locality, and were awarded a technical assistance package to be provided by AECOM for Design and Masterplanning advice and guidance. This work has been of great value to the KNP team.

The report contains a large amount of guidance, best practice, and future insight, including a chapter on design guidance, the first part of which (AECOM report Section 3.1 – Placemaking and Design Principles) provides a Design Code for the Neighbourhood Plan and is included as Appendix K. Other parts of the AECOM report are individually quoted or referenced in this document.

In order to illustrate the concepts described, AECOM created nominal site layouts and access indications. These do not define or describe the ultimate layouts or access proposals, which will be submitted by the developers concerned, and will be subject to all of the usual planning processes and consultations.

2 Knebworth Parish

2.1 History of Knebworth

2.1.1 Introduction

Knebworth is a parish comprised of a principal village of around 2,500 dwellings and several outlying settlements. It is completely surrounded by green belt and encircled by much larger towns; within 15 km are the Hertfordshire towns of Stevenage, Welwyn Garden City, Hertford, Hatfield and Letchworth, and Luton in Bedfordshire.

The first written record of Knebworth is in the Domesday Book. It records an entry of a typical agricultural village for hundreds of years, dominated by a large manor, and surrounded by a small farming community.

Throughout the 1800's, Knebworth had changed very little, but by the end of the century the industrial revolution was finally having a dramatic effect. The population had doubled, and new trades and professions were arriving. This was all due to the opening of the railway station.

2.1.2 Knebworth Garden Village

The opening of the railway station (Figure 2 (left)) about one mile from the village (now Old Knebworth) and just to the west of the Great North Road in February 1884 created a new and separate settlement which, according to a map made at the beginning of the 1900's, became known as Knebworth Station. There were already a number of small cottages and some farm buildings in the area that dated from the 17th and 18th centuries (Figure 2 (right)).



Figure 2 Knebworth Railway Station (left) and Cottage in Old Lane (right)

More homes were built, and new people moved into them creating a separate village, to be known later as New Knebworth, then, just as Knebworth, with the original village becoming known as Old Knebworth.

At the beginning of the 20th century, a plan was devised for the development of a 'garden village' at Knebworth, along the lines of the Garden City at Letchworth which had started in 1903. An estate of 800 acres was laid out, but the plan never totally materialised.

In 1898, when Ebenezer Howard wrote his ideas for a garden city in his book 'Tomorrow – A peaceful path to real reform', it was in response to the problems of squalor, congestion and poverty that he saw in London. It inspired him to believe that he had the solution to the

problem of the uncontrolled growth of towns, and the migration of people from the countryside to the towns, seeking jobs and homes. His idea was to create a 'Garden City', where there would be comfortable, well designed houses, with gardens set in tree lined streets. The factories would be clean, healthy and safe places to work in, and would not pollute the environment. The countryside would be brought into the town.

The then current lord of the Knebworth Estate, Victor, Lord Lytton was inspired by Howard and developed a plan to create his own garden village in Knebworth. In 1904 he consulted with his brother in law, the architect Edwin Lutyens and in 1908 he approached Thomas Adams, who was managing Letchworth Garden City, to take on responsibility for managing the whole Knebworth project. Adams accepted and visited the estate in January 1909.

By 1910 around half the houses in Pondcroft Road, Milestone Road, Westland Road and Station Road and other houses in Park Lane and London Road had been built by contractors to various different styles (Figure 3).

Lutyens employed architects Pepler and Allen. George Pepler was a colleague of Raymond Unwin who was working at Letchworth, and together they founded the Town Planning Institute. His partner was Ernest G Allen, and in 1908 they won two gold medals at the Wolverhampton Model Housing Exhibition and also designed houses for Hampstead Garden Suburb. Another architect was C M Crickmer who was also designing both for Hampstead Garden Suburb, and Letchworth. The Knebworth scheme was therefore attracting the most influential architects of the day (Figure 3).



Figure 3 Pondcroft Road single storey homes (left) Lutyens designed shops (right)

In 1908, plots of land were being bought up by local builders, and in September 1909 the then Lord Lytton held a meeting with local residents to explain the arrangements he was making for the development of his land.

He explained that, following the example of Letchworth, Bourneville and other garden villages and cities, he had decided to have a proper town planning scheme. It provided for wide main avenues, ample recreation spaces, and large gardens. The average number of houses to the acre was less than 10. The first part of the scheme was Stockens Green where some houses were built around a large public green space (Figure 4).



Figure 4 Spacious green Stockens Green

In 1912 a County Council school was erected in London Road large enough to accommodate all the elementary school children from the newer part of the village. It has been expanded over the years and is currently a Primary and Nursery School for just over 400 children.

2.1.3 The First World War and After

During the First World War, building everywhere in the country came to a grinding halt and the cost of materials rocketed. At the same time, the 1918 Labour Party manifesto wanted “a substantial and permanent improvement in the housing of the whole people. At least a million new houses must be built at once at the State’s expense, and let at fair rents, and these houses must be fit for men and women to live in.” Responsibility for providing cheaper housing was now being met by the local authorities, and the co-partnership model went out of fashion.

New housing was being provided at Welwyn Garden City, Hatfield and Letchworth, meaning there was more availability of homes. The 1930s was a period of depression and high unemployment, so the idea of home ownership was out of the question for most people. The Town and Country Planning Act came into force in 1947 and responsibility for the approval of new homes came under the local authority. All these factors probably contributed to the slow down, and eventual curtailment of the Knebworth Garden Village plans.

2.1.4 Post First World War

After the first world war Oakfields Avenue, Oakfields Road, and part of New Close were built. After the second world war an entire council estate was built west of Gun Road Gardens and part of the land between Park Lane and Stockens Green was in-filled. (Figure 5)



Figure 5 Oakfields Avenue (left) and Wadnell Way east of Gun Road Gardens (right)

2.1.5 Later Developments, into the 21st Century

Then in the mid 1970's a number of developments occurred. A large estate of around 180 dwellings known as the Wimpey Estate was built between Park Lane and Stockens Green, later being increased to around 200 homes. This estate was built to a style typical of the period and brought a new era to the style of Knebworth.

Two large houses next to the old Great North Road, Pelham Lodge and Warwick Lodge were pulled down and 68 flats and maisonettes known as Haygarth were built. Gun Farmhouse was demolished, and 30 dwellings were built on the site, now known as Sayer Way (Figure 6) and a number of warden-controlled flats were built in Deanscroft.

In the early 1980's a further 100 dwellings were added to the south west corner of the village built on former farmland and known as the Rialto Estate (Figure 6). In hindsight the design of this estate can be regarded as not following the original Garden City principles and consequently has minimal green space for the residents to enjoy.



Figure 6 Properties in Sayer Way (left) and Woodstock, Rialto Estate (right)

Around the same time a smaller development was undertaken adjacent to Old Knebworth consisting of 15 high quality dwellings arranged around a village green, adjacent to the Lytton Arms Public House. It is actively managed by Old Knebworth Amenity Company. The layout has successfully engendered a community spirit among the residents and the existing properties in the area. Subsequently, a further 9 properties (Manor Farm Stables) were built in the vicinity and reflect the original use of the buildings (see Old Knebworth Conservation statement (NHDC, n.d.)).

During the late 1980's a second Wimpey Estate (Figure 7) was built on a brownfield site adjacent to the railway station. This consisted of approximately 125 dwellings and Knebworth Village Trust was formed in 1987 to administer the planning gain from this development. The Trust encourages grant applications from organisations active in the village, in order to distribute funding locally, including planning gain from developments.

The great majority of this development took place to the west side of the village and is separated from the old Great North Road, now B197, by the railway line with only three narrow bridges for traffic to pass through – Gun Road, Station Road and Deards End Lane, a Scheduled Monument.

This was not a great problem for many years but the increase of private car ownership in the latter half of the 20th century has led to these three crossings becoming pinch points, particularly Station Road Bridge. All three have a carriageway barely wide enough for 2 cars to pass and one narrow pedestrian walkway.



Figure 7 Kerr Close, 2nd Wimpey Estate (left) and Constance Place (right)

Since the year 2000 there have been a number of small but significant developments around Knebworth. There was a Boys Home in a large 3-storey house at 111 London Road. During the late 1970's it became emergency accommodation for the homeless and later it was home to a children's nursery. Since 2010 it has closed and been demolished. The site is now Constance Place, 26 flats for the over 60's.

In 2006 the Station hotel car park was sold and now has 8 flats, and around the same time a private residential property a few hundred metres away across the road was also redeveloped into 6 flats. In 2007 a garage at the rear of St Martins Road Car Park was demolished and replaced with sheltered accommodation, 23 flats for the over 55's.

Bulwer Lytton house, a home for the elderly built in 1981 and run by HCC was sold in 2013 and is now Oak Tree Gardens, a development of 13 detached dwellings. The former Hamilton Billiards company close to the railway station closed and was sold along with an adjacent site. A block of luxury flats, 1 & 2 Park Lane, have been constructed on the site and with another 10 flats in Redemption House, formerly Station House, adjacent to the railway station.

Chas Lowe Builders Merchants started in Knebworth in the late 40's. It was a family run business that employed quite a few local people. The builders merchant, which was located adjacent to London Road in the area known as the 'high street', closed in 2018 and has become retirement/assisted living flats; 47 flats for the over 70's.

Most of these recent developments have been on brown field sites at the expense of commercial properties. The St Martins Road Car Park development meant the closure of a car repair business. The Oak Tree Gardens development replaced a care home and 1 & 2 Park Lane is on the site of Hamilton Billiards, set up in the 1970's and the adjacent site which has been a wood yard, a van hire company and a call centre among other things.

This means that since 2000 housing numbers in the parish have risen while employment opportunities have fallen.

2.2 Knebworth Today

During the last 50 years around 1,000 new homes have been built in and around Knebworth though there has been little or no improvement in facilities, amenities or infrastructure. The issues about the narrow railway bridges persist as most traffic in and out of the village uses the B197. There are widespread concerns that all three are dangerous for pedestrians, particularly Station Road Bridge.

Much of the development has not been sympathetic to the character of Knebworth, and yet the Lutyens Garden Village concept still has a significant impact on the culture and style of the village. When viewed from adjacent countryside the village has a green and open appearance, which is the legacy of Victor Lytton and Edwin Lutyens' vision (Figure 8) and (Figure 49). Future developments within Knebworth should enhance those aspects of Knebworth and not further the construction of badly designed, badly laid out, overcrowded developments of the 1970's and 1980's.



Figure 8 Village appears green and open (left), C21st Green spaces and trees (right)

Although the original Garden Village concept is no longer in line with current thinking on Town Planning, the spirit and intention of the plan was sound and still relevant today. In the early 20th century the concept of a Garden Village was visionary and futuristic. Now, in the early part of the 21st century visionary and futuristic developments will have minimal environmental impact, be designed to enhance social cohesion, be well connected for cycling, walking and public transport, be designed and laid out in a manner that makes them pleasing places to live, with plenty of trees, without coalescence with neighbouring towns and villages. And that is what this Neighbourhood Plan is intended to achieve.

2.3 Local Statistics

Local statistics are available from the Office of National Statistics is available from (Nomisweb.co.uk, n.d.). A snippet of the information available is below:

- Knebworth Parish has a population of 4,496 people in 1,935 households
- There are 3,262 residents aged between 16 and 74. Of these, 76.9% are economically active (North Herts comparison = 74.9%) and 12.2% are retired (North Herts comparison = 13.3%).
- There are 2,912 cars or vans in the parish, an average of 1.5 cars per household. The average for North Herts is 1.38 per household.
- Home ownership is 68%, which compares with 65.6% for North Herts.

3 Vision and Objectives

3.1 Vision

A draft version of the vision and objectives was presented to the public during the open days in April 2018. As a result of the comments received, the vision was updated and improved. The vision takes into account the need for growth whilst maintaining the character of Knebworth and minimising the impact on the environment.

Knebworth aims to be a vibrant and inclusive village community, a great place to live that is distinct and separate from its neighbouring communities. A place that aspires to good design and improved environmental performance where everybody has access to green spaces. A community that will accommodate sustainable growth and development in its population, services and infrastructure that embraces our values, has the minimum impact on local nature and wildlife and that ensures Knebworth's fundamental rural character is maintained.

3.2 Objectives

In order to ensure the Neighbourhood Plan's objectives were derived from the vision statement, the adjectives in the statement were highlighted and colour coded. The adjectives included: Inclusive, Vibrant, Separate, Sustainable, Character, Access and Impact. Objectives were written to achieve the highlighted words. These objectives were consulted on at the same time as the vision statement, during the Open Days in April 2018, and then amended to remove overlaps and fill gaps. The list of objectives is as follows:

- A. **Maintain the distinctiveness and separation of Knebworth from nearby towns and villages**
- B. **Support existing employment locations within the built-up area and encourage new employment opportunities throughout the parish**
- C. **Encourage and support a diverse range of retail and service uses in the village centre, retain and protect the 'high street' retail frontage and retain the two public houses**
- D. **Encourage the provision of suitable buildings for small scale businesses (including community shops) within new residential developments**
- E. **Encourage the growth of home-based businesses including the provision of shared workspaces**
- F. **Ensure all new developments are inclusive and accommodating to the different needs of local residents including affordability and accessibility**
- G. **Promote best practice in environmental performance of all construction projects to achieve low energy usage, incorporate renewable energy initiatives, conserve water, re-use building materials, provide electric car charging points and ensure all new buildings are carbon-neutral**
- H. **Require all new development to be of high-quality design and contribute towards Knebworth's character by being sympathetic to design of surrounding areas**
- I. **Retain the existing architectural character of the Garden Village, conservation areas and other heritage assets**

- J. Create attractive, easily accessible safe neighbourhoods through good design following the principles of 'Placemaking'
- K. Seek cost effective and innovative solutions to minimise the amount of land taken up with car parking
- L. Ensure that all current and future community facilities, amenities, medical resources and service provision are inclusive, easily accessible and do not diminish in terms of quantity and quality to serve the growing population
- M. Protect, enhance and increase accessibility to, and the number of, green spaces for recreational and health use
- N. Identify options for provision of a community information space
- O. Ensure future school and pre-school provision meets local needs, is high quality, offers choice, and includes appropriate accommodation, adequate facilities and safe and convenient access routes
- P. Find a solution to the 'high street' traffic and parking problems
- Q. Negotiate for the provision of disabled access to rail station platforms
- R. Support and encourage use of sustainable modes of transport including ensuring access roads through new developments are suitable for bus routes and prioritise active travel
- S. Provide guidance on eliminating air, light, soil, water and noise pollution
- T. Lobby appropriate bodies to undertake required improvements to eliminate current flooding problems and ensure new development is designed to prevent future flooding issues
- U. Protect key views and character areas from the negative impact of new development
- V. Preserve existing and design integral wildlife corridors and habitats into new developments to improve biodiversity, reducing public lighting to the minimum needed to ensure residents' safety where light pollution impacts wildlife

3.3 Objectives mapped to Policies

Each Neighbourhood Plan policy or item in the Action Plan will help to deliver one or more of the objectives listed above. A table showing the policies mapped to the objectives can be found in Appendix B .

3.4 Policies and Policies Map

The following chapters set out the planning policies for Knebworth Neighbourhood Plan for the period 2019 – 2031. This ties in with the end of the plan period for the NHDCLP 2011 – 2031. The planning policies, together with the reasoned justification for them, reflect the main issues raised through consultation with the community and provide the means by which Objectives A to V will be achieved. The Policies Map in (Appendix A)should be read in conjunction with the policies as it shows where in the neighbourhood plan area the policies apply e.g. which areas are designated as Local Green Space.

4 Policies – Development Strategy

4.1 Introduction

Knebworth is a large village, not a town, with its own special historic character as one of the early garden villages. The context of Knebworth's historic character is explained on the website Herts Memories (Hertsmemories, n.d.).

The following objective relates to the Development Strategy policies:

- A. **Maintain the distinctiveness and separation of Knebworth from nearby towns and villages**

4.2 Policy KBDS1 Retention of Separation Between Settlements

KBDS1 Retention of Separation Between Settlements

Development within the Knebworth village boundary will be encouraged, in order to retain the separation of Knebworth from other settlements, particularly Stevenage to the north, Woolmer Green to the south, and Bragbury End to the east. Proposals within or outside the village boundary that impact on the special character of the village will not be supported.

The village is surrounded by Green Belt and sits astride the B197 road with the small village of Woolmer Green to the south and the much larger town of Stevenage to the north. The NPPF paragraph 134 states the 5 purposes of the Green Belt, including 134. b) to prevent neighbouring towns merging (coalescence) and 134. d) to preserve the setting and special character of historic towns.

The North Hertfordshire Green Belt Review Update 2018 (NHDC, 2018) was prepared by NHDC as an update to the Green Belt Review submitted alongside the NHDCLP in June 2017. A review was undertaken to ensure that a significant Court of Appeal decision (*Samuel Smith Old brewery –v-North Yorkshire County Council [2018] EWCA Civ 489*) had been taken account of. This decision established that an assessment of potential development on the openness of the Green Belt should include the consideration of the impact upon the visual dimension of openness as well as the spatial dimension of openness.

Green Belt land around Knebworth was labelled, in the review, as parcels 8a – 8d. The three Green Belt releases for development proposed by NHDC were in the following parcels; KB1 in 8a, KB2 in 8d and KB4 in 8b and 8c. The review found that parcel 8d was more significant in terms of its importance in safeguarding the countryside, than previously thought. The parcel was assessed as being of significant importance rather than moderate importance in the original Green Belt Review. However, in the overall comparative analysis of these four parcels of land, it was confirmed that they all made a significant overall contribution to Green Belt purposes.

The village community feels that avoiding coalescence or avoiding merging with adjacent communities is considered important to retain its essential character and independence. In particular, ensuring the existence of the strategic gap between Knebworth and Stevenage is paramount (see Figure 9 Strategic gap between Knebworth and Stevenage). The parcels

considered to play the largest contribution to the prevention of merging were those to the north and east of Knebworth, 8b and 8c)



Figure 9 Strategic gap between Knebworth and Stevenage (left) and Bragbury End (right)

4.3 Policy KBDS2 Density of Housing Development

KBDS2 Density of Housing Development

The density of new development should be in sympathy with adjacent, existing buildings, so that, on a large site, the density could vary. Housing densities should respect site boundaries, trees and hedgerows in situ, existing properties and the character of surrounding areas, in accordance with Garden Village design principles. Reference should also be made to the AECOM Design Guidelines at Appendix K Any proposed development that has an inappropriately high housing density for its location will not be supported.

The NHDCLP states that given the design-led approach to development set out in the plan, district-wide density standards have not been prescribed. Development on the periphery of settlements should generally be at a lower density to mark the transition to the rural area beyond. In town centres and close to the railway stations higher densities will be considered appropriate in principle but will require particular care in the design with respect to avoiding the sense of overcrowding or congestion. That principle is carried forward into the Neighbourhood Plan.

However, in order to guide development in Knebworth, which has its own special character, a report titled Knebworth Neighbourhood Masterplanning and Design Guidelines 2019 was produced by AECOM for Knebworth Parish Council (AECOM, Feb 2019). The report refers to guidelines for dph and estimated housing numbers for development sites allocated in the NHDCLP Policies KB1, KB2 and KB4.

The full AECOM report can be accessed separately on Knebworth Parish Council's website at: <https://www.knebworthparishcouncil.gov.uk/uploads/aecom-report-knebworth-final-lowres.pdf> or at <https://knebworthneighbourhoodplan.org.uk/>

5 Policies - Local Economy

5.1 Introduction

In gathering the views of those people who live in, work in, or visit Knebworth, it became apparent very early after the 2017 survey and confirmed in later public consultations, that the businesses, including retail, centred around the 'high street' (see the Policies Map), formed an essential part of why 'Knebworth is a good place to live'. Retention and enhancement of the Village centre, including the improvement of access to the village centre by pedestrians and cyclists is, therefore, a key objective of these policies, see also (HCC, 2018) and Policy KBT1 Sustainable Modes of Travel).

However, it is recognised that local hubs of shops, community spaces and small business units, will be necessary to support both the reduction of dependence on motor vehicles and those people unable to walk to the Village centre.

There is an increasing trend for businesses to operate 'on-line', for employees to more frequently operate from home, for more people to become self-employed and for small start-up companies to commence and grow, locally. There has also, recently, been a significant loss of employment opportunities, due to the re-allocation of business/commercial premises to residential use. This gives increased impetus to the need to retain/provide facilities for use as shared workplaces, for un-shared business units, for business storage, for improved communication and connectivity, and for business vehicle parking and access.

New premises for business use need to be encouraged throughout the Knebworth Parish, in places where there is good access and where the activities do not negatively impact those living nearby. This is consistent with NHDCLP Policy SP3.

The following objectives relate to policies on the local economy:

- B. Support existing employment locations within the built-up area of the Plan and encourage new employment opportunities throughout the parish**
- C. Encourage and support a diverse range of retail and service uses in the village centre, retain and protect the 'high street' retail frontage and retain the two public houses**
- D. Encourage the provision of suitable buildings for small scale businesses (including community shops) within new residential developments**
- E. Encourage the growth of home-based businesses including the provision of shared workspaces**

5.2 Policy KBLE1 New Businesses

KBLE1 New Businesses

Proposals for new business space within the existing Retail Area or at other existing commercial locations will be supported, providing they do not adversely impact local amenities or traffic conditions.

In recent years several businesses have left the village and their vacated sites have been granted planning permission for a change of use from employment to residential. This Policy aims to reverse the recent loss of businesses from the village centre and from around the

railway station by encouraging additional employment opportunities for current residents and for residents of the 30% increase in residential properties proposed in the (NHDCLP, 2016, pp. 176-179).

The Neighbourhood Plan supports the viability of local businesses and their expansion, and the establishment of new businesses where this is proportionate and appropriate in the individual circumstances. The intention is to avoid Knebworth becoming even more of a “dormitory” settlement which is over dependent on outward commuting. This issue was highlighted in the AECOM Report (AECOM, Feb 2019, p. 13) which states that ‘Facilities and offices to stimulate local businesses should be developed around the ‘high street’. This is consistent with NHDCLP Policy SP4 ‘Town and Local Centres’

5.3 Policy KBLE2 Rural businesses

KBLE2 Rural Businesses

Proposals for the conversion, expansion or change of use of rural buildings for business and tourism uses are likely to be supported where the development conforms to national and county guidance, and Local Plan and Neighbourhood Plan policies, is well designed and proportionate to existing buildings, meets accessibility requirements and is demonstrated to have a minimal traffic impact .

Very little land is available within the settlement boundary of Knebworth to accommodate new businesses to generate employment. However, the Neighbourhood Plan area does include a large rural area. Some businesses already operate from buildings previously used for agricultural purposes. There may be scope for further new businesses in redundant or under-utilised suitable rural buildings, or home conversions, provided that the businesses are appropriately scaled and ensure minimal impact on adjacent residential properties. (NHDCLP, 2016) para 5.9 and a briefing document which highlights “*Rural services account for most of the economic activity and the majority of jobs in rural areas. With a share of 65% of the rural Gross Value Added (GVA) (1) in 2013 in the EU, services include: both public and private services for people (education, health, public transport, social care, dentists, post offices, shops, garages, etc.); services for business (finance, consultancy, etc.)*” (Business Models for Business Services, p. 1),

This policy will encourage the provision of additional employment opportunities for current and future residents throughout the Neighbourhood Plan Area.

It will also enable owners to make better use of, or bring back into use, existing agricultural buildings for local start-up hi-tech businesses and mixed-use premises for small businesses including offices and small commercial units. It is expected that such businesses would predominantly be of Class E – commercial, business and service and B8 – storage and distribution.

The NHDCLP recognises the benefits tourism can bring to an area and acknowledges that its rural area is a place for people to visit, for tourism as well as leisure and its contribution to the provision of jobs in policies SP3 Employment and ERC8 Tourism. The NPPF para 83 (NPPF, Feb 2019) supports a prosperous rural economy and states that planning policies and decisions should enable sustainable and accessible rural tourism development which respects the character of the countryside and also the sustainable growth and expansion of all types of

businesses in rural areas, both through the conversion of existing buildings and well-designed new buildings.

Knebworth House already attracts tourists and there may be opportunities for more tourism related development in the surrounding area. This policy to support growth of rural businesses is consistent with NHDCLP Policy ETC2: 'Employment development outside Employment Areas'

5.4 Policy KBLE3 Village Centre and Existing Businesses

KBLE3 Village Centre and Existing Businesses

The village centre supports a diverse range of retail and service uses which should be retained, wherever possible. Existing premises with ground floor access should retain an active retail frontage and new buildings should create new active retail frontage, in the Retail Area, as defined on the Policies Map, i.e. parts of 'high street' (London Road) and Station Road.

Redevelopment of any of the buildings on the 'high street' (London Road) will require the retention of the characteristically wide footway by fixing the building line no less than 23ft (7metres) from the current centre of the highway.

To encourage the retention of Knebworth's unique SME's, proposals to convert existing business land (buildings and/or associated unbuilt areas) to residential, outside the village centre including no 1 Stockens Green, Art Van Go at no 1 Stevenage Road, The Station public house and no 2 Station Approach, will not be supported, unless alternative land/buildings for flexible business space/workshops are provided within the Knebworth settlement boundary (as defined in NHDCLP).

The loss of existing business premises outside Knebworth settlement boundary including The Lytton Arms public house and the radio station, Old Knebworth Lane will be resisted.

The January 2017 (KNP Consultation Statement, 2019) survey revealed that residents are generally happy with the current retail businesses in the village. The community wishes to ensure no decline in the provision of goods and services within the village centre and to ensure that village centre businesses are supported by adequate road-frontage short term parking and controlled traffic flow.

Policy SP4 Town and Local Centres (NHDCLP, 2016) is to maintain and enhance the vitality and viability of village centres. It recognises that Knebworth village centre is currently large enough to provide a focus for the community local to it and considers that it is important that this type of centre continues to provide a mix of shopping, services and community facilities.

Consultation carried out in the process of preparing the Neighbourhood Plan including the open days held in April 2018 and March 2019 revealed that local people believe that to remain a viable retail centre, it is necessary to retain a diverse mix of businesses that cater for the needs of the community in a shopping area that is attractive to, and safe for, shoppers and other 'high street' users. Local businesses said that they are restricted by the lack of parking provision for staff and for customers (KNP Consultation Statement, 2019).

In terms of the width of the carriageway in the village centre, specifically on London Road. It should be noted that the bulk of traffic using the 'high street' does not stop in the village, and is through traffic on the B197, travelling between Stevenage and Welwyn, and beyond. National planning design guidelines (The Planning Service) for parking standards for carriageways, parking bays and pavements indicate a minimum requirement (5.4m for the roadway, 2.4m each side for parking and 2m for footway each side. However, this parking width is still inadequate for delivery vehicles unloading to shops where light vans and other vehicles require more space e.g. the space requirement for a light van is 2.4m x 5.5m. Ideally the 'high street' would meet the national planning design guides for footway, carriageway and parking bay widths.



Figure 10 Parking in village centre

The negative effect of congestion caused by on-street parking and through traffic on the village retail centre and the lack of off-street parking is addressed in the policies within the Traffic, Transport and Parking section of this Plan. The AECOM Report points out that 'Residents overwhelmingly reported that traffic congestion locks the 'high street' (London Road) during peak hours. New development will lead to an increase in the number of users and eventually more congestion' (AECOM, Feb 2019, p. 13).

While respondents to surveys and comments recorded at open days were generally favourable about the retail mix, many stated that the provision of public houses and restaurants in the village was inadequate. This is recorded in 2017-01 KNP Survey issues summary v1.1 (KNP Consultation Statement, 2019) and Section 1.6 of the AECOM Report (AECOM, Feb 2019, p. 13). This feeling is so strong that villagers vigorously opposed the loss of one of the two public houses in the Plan area and authorised Knebworth Parish Council to purchase The Station Pub, which has now been completed. The pub successfully re-opened in early 2020, before and again after the initial Covid lockdown, and forms a gateway to the village due to its convenient location opposite Knebworth station.'

5.5 Policy KBLE4 Community Businesses

KBLE4: Community businesses

The provision of flexible buildings (such as multiple occupancy office/business centres) for use by small businesses, or local community shops within major residential developments located away from the village 'high street', will be encouraged and supported.

NHDC recognises in its draft Local Plan that scattered local shops, services and other facilities provide residents with transport-free access to important goods and services. They also minimize the need to travel, and the less mobile are particularly reliant on these facilities. Policy KBLE4 will encourage developers to include flexible, appropriate satellite retail, small business and entertainment units as part of any new housing developments without detracting from the current 'high street' retail outlets. The provision of community shops would cater for people unable to walk to the 'high street' and would reduce car journeys in line with the recommendations of Transport for New Homes (Transport for New Homes, 2018, p. 19).

Many talented and well-educated young people have to leave the village and the area to find suitable employment (NHDC, 2016, p. 13) Providing mixed-use premises for small businesses including offices and small commercial units may help to reverse this trend.

The community wishes to encourage the provision of some purpose-built small units within the larger new development areas, to enable local start-up hi-tech businesses and mixed-use premises for small businesses including shops, offices, shared workspaces and small commercial units.

5.6 Policy KBLE5 Home Working

KBLE5 Home working

Where planning permission is required, proposals which enable homeworking will be supported, subject to there being no unacceptable impact on local or residential amenities.

The community wishes to encourage homeworking, with particular emphasis on flexibility of use of domestic premises. Homeworking is seen as a means of encouraging business and creating a sustainable community with less commuting, saving individuals the cost of travel and increasing their leisure time. It is estimated, using the neighbourhood plan survey results, that nearly 10% of Knebworth's working people regularly work from home therefore about 90% travel to work (Knebworth Parish Council, 2019).

Since there are limited employment opportunities in Knebworth most of the planned increase in residents will commute from the village unless small business opportunities are available, or home working is positively encouraged (AECOM, Feb 2019, p. 13). Reduction in or elimination of commuting time can improve worker health and productiveness, as well as the environmental benefits of less traffic pollution.

5.7 Policy KBLE6 Telecommunications

KBLE6 Telecommunications

Developers will be expected to work with telecoms providers to facilitate the provision of a robust high-speed broadband infrastructure. to all properties within their developments to encourage and facilitate homeworking and small business use. On larger developments this may include retail/business units.

The community wishes to ensure that the ongoing sustainability of small businesses and homeworking is not restricted or curtailed by poor telecommunications. Good telecommunications are particularly important in supporting the viability and sustainability of homeworking and small businesses (AECOM, Feb 2019, p. 13) The NPPF states that advanced, high quality and reliable communications infrastructure is essential for economic growth and social wellbeing (para 112 (NPPF, Feb 2019).

6 Policies - Built Environment

6.1 Introduction

The second section of the Neighbourhood Plan (Knebworth Parish) provides a background to this section by describing the development of the village, which has a mixture of house types, sizes and styles, from the cluster of early listed buildings around Knebworth House through the Lutyens era (post-war) houses made predominantly of soft red brick, to the modern development that now comprises most of Knebworth village and has not kept up this tradition. Despite much recent building, the trees, hedgerows and green public spaces are an important characteristic of our residential neighbourhoods.

The draft NHDCLP allocates an additional 736 housing units (138 already built or planning permission granted and 598 new) to Knebworth and allows an undefined number for Old Knebworth, of limited infilling.

The Committee on Climate Change recommendations on building a low-carbon economy and preparing for climate change have influenced the policies in this section. The increase in average annual temperatures indicates a switch to low-carbon fuels and renewable energy sources is essential. Other influences are the reduction in cost of Solar PV panels and the cost benefits of including them in new builds compared to the cost of retrofitting. The transition away from petrol and diesel vehicles required by government has also been recognised. Although retro fitting of sustainable energy solutions is acceptable where appropriate, it is easier, cheaper and more successful to include climate change proof design in new builds (Committee on Climate Change, 2019, p. 13).

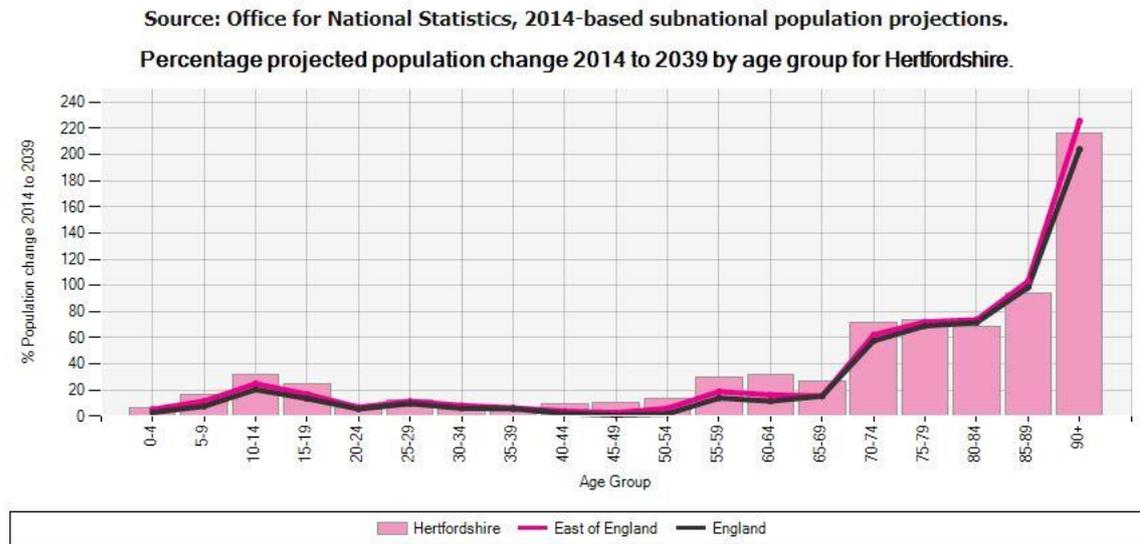
Parking problems experienced in other parts of North Herts, particularly in Great Ashby have triggered the door-to-door survey carried out by the Neighbourhood Plan Steering Committee (KNP Consultation Statement, 2019), which clearly demonstrated that garages provided with new homes and counted as parking spaces are rarely used to park cars. New development in Knebworth should avoid repeating this mistake. Consideration of parking issues arising from conversion of homes to Houses in Multiple Occupation (HMO) should ensure that no further strain is put on residents' parking availability.

Parking problems currently exist in Edwardian streets such as Pondcroft Road, which were designed before car ownership became prolific. They have no garages and shallow frontages insufficient to accommodate cars. This combined with increased demand from commuters using Knebworth Station results in extensive commuter parking in residential streets close to the station. No opportunities have presented themselves during the preparation of the Neighbourhood Plan to provide additional off-street parking at Knebworth Station. Demand is therefore unlikely to abate and makes residential off-road parking provision ever more important.

Concerns expressed about the built environment, during consultation exercises, throughout the preparation of the Neighbourhood Plan include (KNP Consultation Statement, 2019):

- Access to shops and services on pavements of sufficient width, particularly under the railway bridges for pedestrians, prams and mobility scooters
- That the village does not become a dormitory for commuters
- Having space to park their cars close to their homes
- Having adaptable living spaces
- Being close to green open areas
- Maintaining a green environment

The identified trend in increases in the over 65 and over 80s population age groups (Figure 11), raises issues of public transport (buses) provision and safe routes to shops and services for sustainable forms of transport and mobility scooters. The Estate Agents Survey established the need for 1 & 2 bed apartments/houses for single individuals, plus 3 bed houses with a garden for new families.



Source: Office for National Statistics, 2014-based population projections. Crown copyright.

Figure 11 Percentage projected population increase (2014-2039)

The following objectives relate to policies on the built environment:

- F. Ensure all new developments are inclusive and accommodating to the different needs of local residents including affordability and accessibility
- G. Promote best practice in environmental performance of all construction projects to achieve low energy usage, incorporate renewable energy initiatives, conserve water, re-use building materials, provide electric car charging points and ensure all new buildings are carbon-neutral
- H. Require all new development to be of high-quality design and contribute towards Knebworth’s character by being sympathetic to design of surrounding areas
- I. Retain the existing architectural character of the Garden Village, conservation areas and other heritage assets
- J. Create attractive, easily accessible safe neighbourhoods through good design following the principles of ‘Placemaking’
- K. Seek cost effective and innovative solutions to minimise the amount of land taken up with car parking

6.2 Policy KBBE1 Housing Mix

KBBE1 Housing mix

Housing development proposals should demonstrate the extent to which they address current and future housing needs in the Neighbourhood Plan area, whilst meeting the housing mix requirement of the NHDCLP and providing a range of types and size of home. The provision of housing should meet local needs and be ‘tenure blind’.

New social housing delivered in the Neighbourhood Plan area should be part of a mixed community and not visibly distinguish social homes from others in the same development, avoiding design which excludes or stigmatises (Shelter, 2019, p. 10). Affordable homes will be provided in line with current government guidelines or the relevant policy in the Local Plan.

New developments should include different types of housing for people of different incomes and ages and should include starter homes (Research Briefings, 2018), those on the Self-build and Custom-build register and spaces capable of being used as a home office. Feedback at consultation events was that residents wanted to downsize and weren't able to do that (KNP Consultation Statement, 2019).

The provision of 1, 2, and 3-bedroom homes should be a priority. The Knebworth Housing Needs Survey undertaken by CDA Herts in 2004 identified that in terms of affordable housing, the need was predominantly for 1 and 2 bed homes. An update survey was undertaken in 2018 to see whether this had changed. Of those identifying themselves in 'housing need', five families were looking for a 2-bed home and four for a 3-bed home (for the full set of graphs from this survey see Knebworth Neighbourhood Plan Consultation Statement (Knebworth Parish Council, 2019).

The most recent Rural Place Profile for Knebworth (2013) shows that 28.2 % of homes in Knebworth are detached; a significantly higher proportion than for Hertfordshire at 21.1 % and England at 22.3% see <https://www.knebworthparishcouncil.gov.uk/>.

The survey of the four local Estate Agents in 2019 showed that the highest shortfall in house types and sizes was for homes to buy for less than £500k and 3 bed homes. The second highest demand, which was not being met was for 2 bed homes see Knebworth Neighbourhood Plan Consultation Statement (Knebworth Parish Council, 2019).

The NHDC Strategic Housing Market Assessment will guide the mix of homes provided across the District but consideration should be made of local circumstances on a site by site basis.

6.3 Policy KBBE2 Sustainable buildings

KBBE2 Sustainable buildings

Construction methods which engage low energy principles described in this plan, for example Modular building, will be supported as long as the development complies with other policies e.g. design.

Energy usage should be designed to be at or near Zero carbon wherever possible utilising simple design solutions such as orientation of buildings to optimise solar gain. New developments must conform to NHDCLP Policy SP9 Design and Sustainability. Developments that include provision for domestic scale (micro) energy generation from renewable or low carbon sources for at least 10% of their total regulated energy, for new homes or commercial premises will be supported.

Systems for rainwater harvesting and greywater recycling should be integral to new building design wherever possible.

The voluntary use of the HQM (Home Quality Mark) or similar, to improve on the legislative requirements of the Building Regulations, will be actively encouraged.

The Centre for Sustainable Energy (CSE) has long maintained that neighbourhood plans should include policies on mitigation and adaption to climate change. The UK government needs help to meet its commitments under the Climate Change Act, to stop global warming. CSE advocate neighbourhood plans filling the vacuum while local plans 'catch up' (Centre for Sustainable Energy (CSE), 2020).

Neighbourhood plans can help boost the ambitions of developers of all sizes from new estates to a single self-build. In the absence of any specific policy in the draft NHDCLP for the incorporation of renewable energy in new developments, Policy KBBE2 requires a minimal level of renewable energy generation, which should not impact on the viability of a development scheme, in the hope that developers will exceed this minimum. Further recommendations, ideas and references can be found in Appendix K AECOM Design Guidelines.



Figure 12 Designing in renewable energy generation at time of build (Bragbury End)

6.4 Policy KBBE3 Accessibility and adaptability

KBBE3 Accessibility and adaptability

Housing should be accessible and adaptable. All new homes should be designed with flexible internal space to allow the home to be adaptable to changing needs without major reconstruction to extend the lifetime of homes wherever possible.

It is recommended that developers take full account of Building for Life 12 (Lifetime homes) (Birbeck & Kruczkowski, 2015), or subsequent versions thereof, and use this guidance, to help enhance the positive benefits of new development. For example, doorways, floor levels and circulation space within the home and garden areas should be designed for easy access by all abilities and avoid creating trip hazards. The Building Research Establishment also produces useful guidance for reference such as the briefing paper Homes and Ageing in England (BRE, 2015).

Attention to simple details can help to make a new development stand out as exemplary. For example, ensuring letter boxes are installed at a height of 700mm to 1700mm from the bottom of the door for the benefit of those delivering items through them. A bill was brought before parliament in 2019 to ban low level letter boxes. Although the bill was not passed, it was supported by the Building Regulations Advisory Committee to include standards for letter box height in the next review of Building Regulations (Dawson, 2019). Another example is ensuring the right ratio of tread to rise on steps makes going up and down safer and easier. Generally outdoor steps should have a rise of 5 ½ to 7 inches and a tread of 12 to 18 inches (Garden Gate Magazine, 2012).

It is recommended that new developments use the 8 Principles of the 'Building in Context' toolkit devised by Historic England, CABE and the Kent Architecture Centre, to develop their designs

6.5 Policy KBBE4 Design

KBBE4 Design

New developments including new build properties, extensions, or conversions requiring planning consent, should be sympathetic in design to surrounding buildings whilst demonstrating the highest current design standards and be appropriate to their context in a Garden Village. Design principles (extracted from the AECOM report) are included as Appendix K :

Appropriately screened bin storage should be provided within the curtilage of each property.

Provision should be made for cycle storage and charging for electric bicycles, cars and vans.

Garages are rarely used for parking cars and off-street parking provision in accordance with NHDCLP should be provided in addition to garage spaces unless they meet the minimum standard of 3m x 7m. Development proposals resulting in the loss of garages or off-street parking areas will not be supported unless space is available within the property's boundary to meet NHDC parking standards. The use of dual function green space and parking areas would be welcomed.



Figure 13 Issues to be avoided. Examples from Hemel Hempstead of garages clearly not used to park cars (left) and Great Ashby with pavements obstructed by cars (right)

New development should respond to the existing pattern of development within the village of Knebworth, taking its cue from existing block sizes and structures, patterns of plot subdivision and the relationship between built and non-built private spaces. Building forms and proportions, roofscapes and overall appearance should be considerate towards and positively contribute to the local character of the village.

The low-rise scale, featuring predominantly two storey dwellings should continue to be the norm. New development should be sympathetic in scale to this context and not exceed 2-2.5 storeys in residential areas.

Responding to local character should not necessarily result in pastiche replicas. Instead, emphasis should be placed on contemporary interpretations of traditional building forms to

achieve the objectives of the Neighbourhood Plan including sustainability, accessibility and affordability. Design principles are provided in Appendix K AECOM Design Guidelines.

In addition, specific requirements can be found in:

- North Herts Open Space Review and Standards (2016) – As shown in section 2.2 of the AECOM report.
- Social Infrastructure Facilities Requirements can be calculated using AECOM's infrastructure model as shown in section 2.3 of the AECOM report.
- Parking Requirements are within North Herts District Council Local Development Framework – Vehicle Parking at New Development Supplementary Planning Document (2011) – As shown in section 2.4 of the AECOM report, or any subsequently updated document.

Most local authorities appear to accept that less than 50% of private garages are used regularly to park cars in. NHDC Sept. 2011 refers to 'Roads in Hertfordshire' Jan 2011 which states "research shows in some developments less than ½ the garages are used for parking cars and that many are used primarily for storage or have been converted to living accommodation". A survey undertaken by Warwick DC is often quoted where only 36% said they used their garage regularly for parking and 56% of garage owners said that they seldom or never used their garage for parking. Of those not using their garage for parking half said it was because the garage was too small.

Considering new developments, NHDC's standards for new development residential parking (SPD September 2011) require garages to have minimum internal dimensions of 7m x 3m if the garage is to count as a parking space. Based on the above, assuming that all of the people claiming a small garage had much larger garages and then regularly used them for parking (which is very unlikely); over 25% of garage owners would still not park their cars in their garage. Providing larger garages is clearly not the answer to residential parking issues.

In developments of 200 residential properties with individual garages, where all the garages counted towards the minimum provision of off-street parking (i.e. 7m x 3m size) this could mean a minimum of 50 vehicles regularly parked on the carriageway. This reduces usable road space, can obstruct efficient flow of public transport and emergency vehicles and can lead to parking on the footway. The actual number of cars parked on the carriageway is likely to be far greater and increase over time.

Looking at existing properties in Knebworth, during 2017 to mid- 2020, (40 months), planning permission was given for the removal or conversion of 22 residential garages. If this trend continues at a similar rate a further 70 garages will be lost during the remaining period of the emerging NHDCLP. Although some of the properties will have adequate additional space to accommodate the displaced car within the property boundary many will not.

However, this is only the 'tip of the iceberg'. Currently planning permission is not usually required to change the use of a garage, providing that the work is internal and does not involve enlarging the building. There are exceptions if the house is within a conservation area or is a listed building, when planning permission may be required. It is estimated that only 10% of garage conversions require full planning permission, implying that many more than those identified will have been converted to other accommodation.

However permitted development rights can be removed by condition on new properties, which may prevent a garage from being able to be converted without planning permission. Removing the permitted right to convert a garage or parking space is the intention of the

proposed policy KBBE4. Knebworth Parish Council will request this option on new residential planning permissions. Any owner wishing to use their garage for residential purposes would have to apply for planning permission which the Parish Council would oppose.

In line with this research, homes should be built with outbuildings for storage and parking should be provided, in addition, within the curtilage of each property (if possible), appropriate to the size of the property, to avoid on-street parking as per NHDCLP standards for vehicle parking in new development. Innovative solutions to the provision of residential car parking will be encouraged, including small communal parking areas designed to benefit from natural surveillance while not detracting from the street-scene. All parking areas should be capable of being converted to green space in anticipation of a future reduction in private car ownership.

6.6 Policy KBBE5 Masterplanning and Placemaking

KBBE5 Masterplanning and Placemaking

New developments proposed in the NHDCLP should be masterplanned together in accordance with NHDCLP Policy SP9 Design and Sustainability, to create the physical conditions that residents and users find attractive and safe to encourage social interaction, and layouts that are easily understood.

Legibility, easy access and safety together with a choice of walking/cycling routes will be encouraged.

Residential parking should be safe and convenient and should not undermine the quality and amenity of streets. Where possible, the predominant parking mode should be on plot, to the side/front in the case of houses, or in parking courts for flats. Underground parking as a solution to minimise land take for car parking should be incorporated in new developments at every opportunity.

Negative design features such as vehicle barriers, gated housing developments or narrow footpaths between high sided walls or fences should be avoided.

Placemaking and Design Principles for development in Knebworth are provided in Appendix K AECOM Design Guidelines.

General guidance on Placemaking and Design can be found in NHDC LP Policy documents and guidance specifically for Knebworth are provided in Appendix K AECOM Design Guidelines. Tree-lined streets are a feature in Knebworth and should be present in major new developments. Street tree planting is an acknowledged government objective which helps to mitigate pollution and support wildlife in an urban setting, as evidenced by the Urban Tree Challenge Fund <https://www.gov.uk/guidance/urban-tree-challenge-fund>. Street tree planting should be included as part of the work to strengthen green infrastructure /greening of the village.

Other guidance can be found in 'Roads in Hertfordshire Design Guide 3rd edition' published in 2011, which refers to the principles of the government's best practice advice on urban design, which is 'Manual for Streets' and 'Manual for Streets 2'. <https://www.gov.uk/government/publications/manual-for-streets> and Historic England's advice note "Streets for All: Advice for Highways and Public Realm works in Historic Places. <https://historicengland.org.uk/images-books/publications/streets-for-all/>.

6.7 Policy KBBE6 Site KB1 Land at Deards End

KBBE6 Site KB1 Land at Deards End

Land allocated in the NHDCLP, identified as KB1 should be masterplanned in accordance with the emerging NHDCLP Policy SP9 Design and Sustainability to create the physical conditions that residents and users find attractive and safe to encourage social interaction, and layouts that are easily understood.

All of the following criteria should be adhered to in planning the detailed site design:

- a. development densities should be appropriate to site boundaries, hedgerows, existing properties and the character of surrounding areas, including Deards End Lane Conservation Area, in accordance with Garden Village design principles;
- b. residential development offset from motorway to reduce exposure to A1(M) noise and air pollution;
- c. green spaces along A1(M) facing side, incorporating allotment gardens and potential noise mitigation features;
- d. new outdoor sports facilities, including ancillary facilities (toilets, changing rooms, and parking for 20 cars);
- e. green buffer at interface with open fields and Priority Habitat Inventory woodland to the north;

Approximate areas to be allotted to residential use, open space, allotments and the main road network are calculated and described in section 4.4.2. of the AECOM report (AECOM, Feb 2019).



Figure 14 Aerial view of KB1 (middle ground)

6.8 Policy KBBE7 Site KB2 Land off Gipsy Lane

KBBE7 Site KB2 Land off Gipsy Lane

Land allocated in the NHDCLP, identified as KB2 should be masterplanned in accordance with the emerging NHDCLP Policy SP9 Design and Sustainability, to create the physical conditions that residents and users find attractive and safe to encourage social interaction, and layouts that are easily understood.

All of the following criteria should be adhered to in planning the detailed site design:

- a. development densities should be appropriate to site boundaries, existing properties and the character of surrounding areas, including Stockens Green Conservation Area, in accordance with Garden Village design principles;
- b. residential development offset from motorway to reduce exposure to A1(M) noise and air pollution;
- c. green spaces along A1(M) incorporating potential noise mitigation features;
- d. green buffers along Gipsy Lane to screen Stockens Green Conservation Area;
- e. on-site roadways to remove the need for this part of Gipsy Lane to be used for vehicles but reserve it for pedestrians and cyclists, except for access to the existing properties, to retain low-traffic rural character of Gipsy Lane or new footways along Gipsy Lane for pedestrian connectivity and safety; and
- f. new outdoor sports facilities, including ancillary facilities (toilets, changing rooms, and parking).



Figure 15 Site KB2 Policy KBBE7

Approximate areas to be allotted to residential use, open space, allotments and the main road network are calculated and described in section 4.5.2. of the AECOM report (AECOM, Feb 2019).

6.9 Policy KBBE8 Site KB4 Land east of Knebworth

KBBE8 Site KB4 Land east of Knebworth

Land allocated in the NHDCLP, identified as KB4 should be masterplanned in accordance with the emerging NHDCLP Policy SP9 Design and Sustainability, to create the physical conditions that residents and users find attractive and safe to encourage social interaction, and layouts that are easily understood.

All of the following criteria should be adhered to in planning the detailed site design:

- a. development densities should be appropriate to site boundaries, existing properties and the character of surrounding areas, in accordance with Garden Village design principles;
- b. site reserved for new secondary school with option to link site with recreation ground;
- c. new community centre, including early years facilities;
- d. green buffer at interface with open fields;
- e. new footways along Watton Road and Swangleys Lane for pedestrian connectivity and safety;
- f. on-site roadways remove the need for Old Lane to be used for vehicles and instead be reserved for pedestrian and cycle use except for access to the one existing property; and
- g. traffic studies recommended to improve pedestrian safety on Swangleys Lane between London Road and Old Lane.



Figure 16 Site KB4 Policy KBBE8

See also section 8.5 Policy KBS4 KB4 School Site.

Approximate areas to be allotted to residential use, open space, allotments and the main road network are calculated and described in section 4.6.2. of the AECOM report (AECOM, Feb 2019).

7 Policies - Wellbeing

7.1 Introduction

It was evident from the comments received during the preparation of the Neighbourhood Plan (KNP Consultation Statement, 2019) that residents were extremely worried about the strain on local services and community facilities due to the huge increase in housing proposed by the NHDCLP. In particular, concerns were expressed about the impact on the GP Surgery, the potential loss of community services such as the library and the allotments. Security, safety and easy accessibility to all cropped up as a matter of interest in all areas.

In addition, the working group looked at the sports and leisure facilities available, plus recreational green spaces and local green spaces. The importance of such open spaces was never more obvious than during the first Corona Virus outbreak where socialising could only be undertaken outdoors, in order to maintain social distancing.

In short, aspects of daily life that contribute to everyone's health and wellbeing are covered in this chapter. A table showing the community facilities and services identified can be found in Appendix C and a table showing all the green and recreational spaces considered for protection can be found in Appendix D . A section on Non-designated Heritage Assets can be found here: Policy KBEF6 Non-designated Heritage Assets.

The aim of the wellbeing policies is to ensure that residential development contributes to the sustenance or enhancement of community facilities and public services, that the provision of new facilities is evidenced by local needs in collaboration with Knebworth Parish Council and that all new amenities, facilities and buildings are suitable for access by people of all abilities.

The Objectives that were developed from the Knebworth Neighbourhood Plan Vision Statement and which led to the development of the wellbeing policies were:

- I Retain the existing architectural character of the Garden Village, conservation areas and other heritage assets**
- L Ensure that all current and future community facilities, amenities, medical resources and service provision are inclusive, easily accessible and do not diminish in terms of quantity and quality to serve the growing population**
- M Protect, enhance and increase accessibility to and the number of green spaces for recreational and health use**
- N Identify options for provision of a community information space**
- U Protect key views and character areas from the negative impact of new development**
- V Preserve existing and design integral wildlife corridors and habitats into new developments to improve biodiversity, reducing public lighting to the minimum needed to ensure residents' safety where light pollution impacts wildlife**

7.2 Policy KBW1 Community Facilities and Services

Policy KBW1 Community Facilities and Services

Commercial or residential development will only be supported where it sustains and enhances community facilities for the benefit of all residents, so that all community facilities, including medical and public services are increased in proportion to that of the increase of the population and trends at that time.

Development proposals will be required to identify their likely impact on facilities and services to demonstrate how any such impacts will be addressed, including the provision of new facilities, if a shortfall caused by the development is identified by a relevant provider or statutory body. This provision should be based on evidenced local needs and discussion with KPC and NHDC Planning.

The retention of a GP Surgery within the village is an essential requirement when considering any future development proposals.

Development will only be supported if it facilitates and increases the opportunity for recreation and improving health and wellbeing.

Planning Applications must demonstrate that all new services, amenities, facilities and buildings are suitable for access by people of all abilities.

7.2.1 GP Surgery

The Knebworth GP Surgery has been established in the centre of the village for over 60 years. It is a partnership surgery with The Marymead Practice, which is based in Stevenage, with a combined list of approximately 12,500 patients. It is expected that this number will increase considerably in the next few years as a result of new housing developments in Knebworth and surrounding districts within the practice boundary area. This area includes nearby villages of Woolmer Green, Datchworth, Oaklands and some parts of Codicote, which are all subject to large, new housing developments over the next few years as a result of allocations by their respective Local Plans.

Feedback from the initial survey highlighted residents' existing concerns regarding access to health provision and difficulties in getting GP appointments. The strength of feeling and relative importance of the issues was demonstrated in the written comments relating to the need for more GPs. It had been proposed in 2004 by the local Primary Care Trust, then the relevant health body, that it was considering the closure of the Knebworth GP Surgery with services being relocated to a new super-surgery in south Stevenage. From Knebworth Parish Plan 2007, there was a clear consensus that it would be unreasonable and environmentally unsound to expect a village population of approximately 5,500, many without personal transport, to travel to Stevenage for day to day GP services.

The Surgery renewed the lease on the existing premises for a short term. Continuation of the GP provision remaining in the village was valued by residents, however new premises were required. As a result, plans were developed for a new GP Surgery if a suitable new location could be found within the village. The plans had been shelved for some years, but in March 2015 an agreement was reached between Hertfordshire County Council and a developer to redevelop the village library premises into a brand new co-located surgery/library site in St Martin's Road.



Figure 17 New GP Surgery (left) and Library (right)

One significant concern of the Practice is that of the number of new developments for the elderly within the boundary area. Each patient is allocated a premium by the NHS and this will provide more income through capitation fees, however, this is unlikely to be sufficient to fund an additional GP and elderly patients often have significant health issues. Locally there are three nursing homes, a retirement homes complex of 26 homes for the over-60s and a current development for 47 assisted-living homes.

Funding for surgery premises is from a different, central locality budget and expected population growth has to be considered when determining the requirements for a new surgery. A pharmacy is included as part of the development, which is run as an independent business by Lloyds Pharmacy.

The Practice has introduced measures to try and reduce GP appointment waiting time such as employing a Clinical Pharmacist, Specialist Nurses and Nurse Practitioner, all of whom can deal with issues that do not require a doctor. The new surgery will also have additional consulting rooms available.

In addition, many medical hours are used for queries relating to social care rather than health; if social care in the village could be improved, it would free up doctors' time for medical care. To this end, a GP Link Worker for Social Prescribing is now attached to the practice. This is a new service. The practice has a very active Patient Participation Group and volunteer members provide an excellent link between patients and staff, some are trained and run a regular programme of Health Walks, they hold coffee mornings. They have noticed loneliness and isolation is a big problem.

7.2.2 Library

The library has always been conveniently located in the centre of the village and, as a valuable asset to the community, the Parish Council requested that the site be included in the Assets of Community Value List in September 2014 and NHDC confirmed its listing on 21st November 2014.

The new library space, combined with the GP surgery is similar in size, but with a more flexible layout which can be used for other purposes and has potential as a new, modern facility. Because the premises are shared with the pharmacy and surgery, it is estimated that the library could benefit from increased usage and therefore be a greater benefit to local residents.

In 2018 Hertfordshire County Council consulted on the future of library services in the county and, with a requirement to save money, proposed that some of the smaller village libraries should be run by volunteers with support from a central library team. Knebworth volunteers also provide tea, coffee and games while the library is open on Monday afternoons, enabling the community to socialise together. Now completed, the new building could provide the much-needed central space for information on medical, social and local assistance, a hub where local voluntary groups, sports and social clubs can publicise their activities and encourage volunteer recruitment.

7.2.3 Neighbourhood Amenities

As a Category A village, Knebworth's facilities are expected to support communities beyond both village and parish boundaries. Development therefore is expected to sustain and enhance current facilities and, wherever possible, to assist in the creation of new ones, or the refurbishment of existing facilities.

Knebworth village was considered to be a village suitable for growth in the emerging NHDCLP, but in order to promote the ongoing prosperity, health and wellbeing of the village and other communities, it is essential to conserve and enhance Knebworth's essential amenities and facilities. As a result, the Steering Committee felt it was important to draw up a list of community spaces and facilities which were considered to be important to village life and must be retained, unless new replacements are provided which expand and improve such facilities and/or equipment for the benefit of the community.

Knebworth has a range of community and recreational facilities and, from the responses to public consultation, it is evident that these are highly valued by the local residents. Support for the safeguarding of key community assets is embodied in a number of Neighbourhood Plan objectives.

As a consequence of Knebworth being planned as a Garden Village, there is a character to Knebworth that includes wide, open spaces, a large degree of openness to the area and many green spaces. Green spaces are an essential feature of the village and contribute to its character, adding to the distinctive open rural feel of the village and harmony with the surrounding landscape, while providing quality recreational space and wildlife habitat.

In order to preserve what is considered to be the identity of Knebworth, a list of all local green spaces, recreational facilities and important buildings that were considered to be landmarks or of local historical interest was formulated.

These lists were then reviewed by the Steering Committee and condensed into lists for consideration using strict criteria. The lists were entered into two spreadsheets, one for green spaces and one for buildings of interest. A workshop comprising of members of the Wellbeing Group, the Steering Committee and our professional planning adviser was undertaken. Each

area and building were reviewed individually under the same criteria to determine the most important ones. The spreadsheets were completed according to the answers given by the workshop members. The Local Green Space Assessment can be found at Appendix D .

The designated Local Green Spaces are all in close proximity to the community, are local in character and are not extensive tracts of land as advised in para 100 of the NPPF (NPPF, Feb 2019). Each is demonstrably special for one or more reasons.

As previously highlighted, Wellbeing Group meetings identified the need for a community space for information on local safety and security issues, plus health and social issues, signposting towards available services and including access to these amenities. A space dedicated to available services would be promoted as a self-help means of reducing GP Surgery visits, perhaps helping to meet the need identified by the GP Practice.

Feedback from the initial survey (KNP Consultation Statement, 2019) indicated that there are sufficient places of worship for different faiths in Knebworth. The contribution of the churches is valued, even by those who do not regularly attend, there is a general lack of awareness regarding the churches' contribution to the community through such initiatives as the Knebworth Family of Churches, formed in June 2008.



Figure 18 St Martin's Church (left) and St Mary's Church (right)

Working under the banner of the Knebworth Family of Churches (KFC), the churches have launched such events as the Good Egg Club (for children in the holidays), study groups and the Good Neighbour Scheme, which provides practical assistance to people in need.



Figure 19 Trinity Church (left) and St Thomas More Church (right)

The wider community greatly appreciates the work of voluntary groups although there seems to be a lack of information about what is on offer and some of the groups are struggling to find volunteers.

Knebworth Cemetery is located just south of the village centre in Gun Road Gardens. It is available for burials of any faith. It is one of seven cemeteries managed by North Herts District Council, approval for use as a burial ground was agreed in June 1978. Information obtained from NHDC indicates that cemetery provision in the region has sufficient capacity for many years to come. It has been subject to flooding in the past.



Figure 20 Knebworth Cemetery, Gun Road Gardens

7.2.4 Sport and Leisure

Outdoor sports and leisure facilities are important features in Knebworth. These community consultations revealed that sports facilities were inadequate and required additional provision. Many residents expressed an interest in extending the range of sports and leisure facilities by collaboration with sports clubs and schools, there may be scope for using the contributions from the Community Infrastructure Levy (CIL), which would be generated by new developments in the parish

According to the NPFA Six Acre standard (Fields in Trust, 2015) the Overall Minimum Standard for Outdoor Playing Space is 2.4 hectares per 1000 population. Currently Knebworth has a population of around 5,500 people which will increase as a consequence of new developments to in the region of 8,000 residents.

KPC currently manages three equipped play areas, Watton Road Recreation Grounds, Lytton Fields play space and King George V play space, Old Knebworth, and Settle Homes manages another, Cherry Close play space. However, there is currently a deficit of some 6.5 Ha, which is likely to grow to a deficit of 12.7 Ha once the new developments have been built.

The Parish Council will actively seek a site for a new indoor and outdoor sports hub within the parish boundary to include an artificial games pitch, a pavilion, changing facilities, parking and ancillary social facilities to serve the growing population.

A new Play Hub could include a range of interactive outdoor play equipment for all ages and would be a central point of focus for outdoor play provision for Knebworth and its surrounding communities, acting as a 'destination play area'

A Sport and Leisure survey was sent to all the numerous clubs, societies and sports groups that use facilities in Knebworth (Knebworth Parish Council, 2019) . Despite there being few responses, there were certain areas that highlighted specific needs within the current community. Additional growth will bring increased pressures.

The facilities and amenities as detailed in the paragraph below have been identified as needing expanding or improving if more houses are built in Knebworth. Therefore, in order to ensure adequate open spaces are provided for sports and leisure activities, reasonable financial

contributions will be required, as appropriate, from each developer to fund additional healthcare and leisure services within the village in accordance with the obligations detailed within the NHDCLP.

Community priorities in terms of additional local facilities to be provided as a result of new development include a centrally located community leisure facility providing a purpose built multi use indoor sports hall with gym and dance facilities, all weather-pitch, changing rooms, storage, meeting rooms and associated administration and parking facilities; this could be a shared facility with the proposed school(s) and used by other village organisations. This facility along with a new allotment space of at least 1.5 Ha and more health care professionals located in the village have been included in the Action Plan in Appendix E .

7.3 Policy KBW2 Local Green Spaces

KBW2 Local Green Spaces

The areas listed below are designated Local Green Spaces. New development will only be allowed within designated Local Green Spaces where very special circumstances can be demonstrated in accordance with the National Planning Policy Framework:

LGS1 Watton Road Recreation Grounds

LGS2 Cherry Close Green

LGS3 Stockens Green

LGS4 St Martin's Green

LGS5 Allotments, Watton Road

7.3.1 LGS1 Watton Road Recreation Grounds

This is the largest and most important green space in Knebworth situated off Watton Road (SG3 6AH). The Recreation Grounds opened to the public in 1929 (Knebworth Through Time, 2011) This is a formal grassed open space with an area around 5.525 Ha. There is a small pond which attracts wildlife, although this needs some maintenance work.



Figure 21 Watton Road Recreation Grounds pond and wildlife

The grass is well maintained and there are five avenues of lime trees which divide the space with accessible footpaths. Three sides of the space are flanked by hedges and fences with the

fourth side looking out onto open fields providing an openness to the space. It is along this eastern border that the children from Knebworth Primary School planted thousands of daffodils to mark the Queen's Golden Jubilee; this is marked as Jubilee Walk on some maps. The recreation grounds are very tranquil in places and were part of the original design for the Garden Village, but it does have multiple uses.



Figure 22 Watton Road Recreation Grounds, one of five lime avenues (left) and Jubilee Walk (right)

The recreation grounds are well used for sports, it has football pitches, four floodlit tennis courts, bowls greens and a well-equipped children's play area. It is used to walk through and for dog walking. Knebworth Bowls Club, established in 1913, is based there, with four outdoor bowls rinks and a small club hut. There is a pavilion, which was comprehensively refurbished, re-opening in August 2005.



Figure 23 Watton Road Recreation Grounds, children's play area (left) and floodlit tennis courts (right)



Figure 24 Watton Road Recreation Grounds, Knebworth Bowls Club (left) and Pavilion(right)

Trained leaders for Health Walks use the Watton Road recreation grounds as their start and finish points for their fortnightly health walks. The walks started in June 2016 and have proved very popular, three grades of walks are now offered by nine trained leaders. The number of walkers is increasing all the time with 38 walkers attending recently; walks end at the Bowls Club where refreshments are provided by members and proceeds go towards Bowls Club funds. The whole event helps activity levels and enables people to reap the health and wellbeing benefits that walking has to offer with the addition of social interaction.

Knebworth Tennis Club has been in existence for at least 80 years. Originally the club had grass courts but there are now four hard courts which are used all year round. A new chalet style clubhouse was opened by Stephen McPartland MP in March 2014 and in 2015 floodlights were installed on three courts. In 2017, the facilities were developed further with an outside table-tennis-table and a toilet in the clubhouse. It is a popular and well used sporting facility.

Stepping Stone Preschool operates from the pavilion making full use of the comfortable environment. The Thursday youth group, run by both paid staff and a rota of volunteers from the Knebworth Youth Project, use the pavilion as their base. It is in a convenient, central location, close to local shops and public transport.

The Recreation Grounds are also used extensively by the Knebworth Football Club, which was originally formed in 1901, and currently caters for around 350 playing members, including boys', men's, girls' and ladies' teams. In addition, there are approximately 80 volunteers to run the teams and club administration. Unfortunately, the facilities are not adequate to cater for the large number of footballers and therefore a lot of the games and training sessions require travelling to other locations such as Woolmer Green and across Stevenage.

However, all users of the recreation grounds for sports purposes have highlighted the lack of sufficient parking for their members and/or visiting teams.

Knebworth Football Club, with a current membership of around 350, both male and female of all ages, highlighted the lack of facilities in Knebworth. They have identified the following as necessary facilities to maintain or improve the sports provision in Knebworth:

- All-weather pitch - to increase local capacity
- Clubhouse/social hub - to provide a social space
- Suitable ground grading for FA Cup - to raise the standards
- Indoor sports hall - to provide a suitable local facility

7.3.2 LGS2 Cherry Close Green

This is an open informal space with an area around 0.213 HA. It is a communal open space for a large housing area (postcode SG3 6DS) and used as a social meeting place, although ball games are not allowed. It is bordered on three sides by houses that have very small gardens. There are a number of exceptional, mature trees and the grass is well maintained.



Figure 25 LGS2 Cherry Close Green

7.3.3 LGS3 Stockens Green

The Green is situated within the Stockens Green Conservation Area (postcode SG3 6DQ) with an area of approximately 0.195 Ha. It is very attractive and has the appearance of a village green, being part of the design of the Garden Village. It is an informal open space with several mature trees and well-maintained grass. No ball games are allowed.



Figure 26 The Green, Stockens Green

7.3.4 LGS4 St Martin's Green

This is an attractive, informal area in the curtilage of St Martin's Church, London Road. It is located in the middle of the village and has an area of around 0.148 Ha. It is a landmark entrance to the centre of the village, similar to a village green. There are many mature trees and well-maintained grass. No games are allowed, but permission is given for one-off events and stalls for community purposes. It is also used informally for picnics.



Figure 27 St Martin's Green, London Road

7.3.5 LGS5 Allotments, Watton Road

The allotment site has an area of around 0.160 Ha between Watton Road and St Martin's Road (postcode SG3 6AQ) and has existed for 40 years. There are approximately 15 allotment plots owned, since early 2020, by Knebworth Parish Council, they are managed and in demand with a waiting list. It is the only allotment site in Knebworth, it is very appealing and tranquil during the growing months, is used for growing food and attracts wildlife such as birds, butterflies and bees. (see also [Policy KBW5 Allotments](#)).



Figure 28 Allotments, Watton Road

7.4 Policy KBW3 Recreational Green Spaces

KBW3 Recreational Green Spaces

Development will only be supported if it includes the creation of new green spaces, play spaces and recreational areas, in accordance with current standards. Developer contributions will be sought to fund additional easy-access leisure amenities including play/climbing equipment and informal social spaces for a wider range of young people. Development proposals must demonstrate that all new playgrounds and recreational areas are suitable for access by people of all abilities.

The areas listed below are shown as Recreational Green Spaces on the policies map. to be protected from new development unless very special circumstances can be demonstrated:

- RGS1 Lytton Fields play space
- RGS2 King George V play space
- RGS3 Cherry Close play space
- RGS4 Amenity land, Meadway
- RGS5 Amenity land, Haygarth

Development that would result in the loss of all or part of these spaces will not be permitted unless they are replaced with better facilities which are at least as accessible to the local community as the current spaces.

7.4.1 RGS1 Lytton Fields play space

This is an important recreational space serving a large housing area within the western centre of the village (postcode SG3 6AZ). It has an area of around 0.418 Ha and is flanked on two sides with houses. It would benefit from gating at the entrances to make it more secure. It has a well-equipped play space with a variety of equipment for all age ranges. It has several mature trees and a large grass area which is well maintained. It is also used for ball games and dog walking. It is a significant community social space and picnic tables make it a welcoming family area.

7.4.2 RGS2 King George V play space

This recreational play space in Park Lane (postcode SG3 6PS) serves the population of Old Knebworth. The land is flanked on one side by houses, but is in a quiet, rural setting overlooking fields on the others. It covers about 0.428 Ha. There is an equipped play area, the grass is well maintained and there is a small area left uncut for wildflowers and to attract wildlife. It is a 1940's playing field in memory of King George V to "preserve and safeguard the land for the public benefit".



Figure 29 Lytton Fields play space (left) and King George V play space (right)

7.4.3 RGS3 Cherry Close play space

This is a small area of around 0.040 Ha at the rear of Cherry Close (postcode SG3 6DS), which is flanked on three sides by houses and garages on fourth side. It is used by the residents of Cherry Close. It is a small play space with equipment, used as a walk through and dog walking.

7.4.4 RGS4 Amenity Land, Meadway

This is a well-maintained grass area off Meadway (postcode SG3 6DN) of around 0.083 Ha. It is an attractive, tranquil space used for social interaction. It serves a large housing area and is important for residents to have this view to overlook.

7.4.5 RGS5 Amenity Land, Haygarth

This is an informal recreational space on Haygarth (postcode SG3 6HF) of approximately 0.068 Ha and the only green space for the residents who have no gardens. It is a well-maintained grass area with many mature trees, some of which have TPOs.



Figure 30 Amenity Land, Meadway (left) and Amenity Land, Haygarth (right)

7.5 Policy KBW4 Valued Community Facilities

KBW4 Valued Community Facilities

In order to maintain an inclusive village community, the following particularly valued and potentially vulnerable community facilities should be retained in community use if possible:

- **The Royal British Legion Hall and Social Club**
- **The Scout Hut and Land**
- **The Library (listed as an ACV but suspended due to redevelopment)**
- **The Lytton Arms public house (listed as an ACV)**
- **The Station public house (listed as an ACV)**

The Valued Community Facilities and all Assets of Community Value (ACVs) listed by North Hertfordshire District Council will be retained unless they are:

- a. **no longer needed/there is no demand for; or**
- b. **acquired by the community to ensure the retention of the facilities in perpetuity; or**
- c. **replaced by better facilities as part of a development proposal.**

7.5.1 Community Assets

The Localism Act 2011 and the Assets of Community Value (England) Regulations give an eligible community group an opportunity to identify a property or land, both privately or publicly owned, that is believed to be of value to their social interest or wellbeing and apply to have it listed. Once an Asset of Community Value is listed, a community group is allowed six months to prepare a bid for the property or land, as and when it is put up for sale on the open market. Groups eligible to nominate an Asset of Community Value include community groups, local parish councils, local neighbourhood planning forums and charities.

Knebworth Parish Council applied to list both the Station public house and the Lytton Arms they were listed in North Hertfordshire District Council's Asset of Community Value List in

2017. Buildings or land only stay on the list for five years. After this period has expired, applications can be made to re-list the asset. The provision of better facilities as the result of development could include better quality facilities or facilities that better meet local demand.

7.5.2 The Royal British Legion Hall and Social Club

The building is situated on Gun Lane (postcode SG3 6AU) and used by community groups.

7.5.3 Scout Hut and Land

This is a small hall with land on Gun Lane (postcode SG3 6BH) of around 0.031 Ha that has historical significance. It is owned by The Scout Association but used by all scouting and guiding groups of all ages within Knebworth. The hut is in poor condition, but the grass area is well maintained. The Scout and Guide leaders say that the central village location is very good, but the condition of the building is deteriorating.



Figure 31 The Royal British Legion (left) and The Scout Hut and land (right)

7.5.4 Knebworth Library

The ACV on St Martin's Road (postcode SG3 6ER) was suspended during redevelopment. The whole site including the new GP surgery will be re-listed once redevelopment is completed.

7.5.5 Lytton Arms

This public house in Park Lane, Old Knebworth (postcode SG3 6QB) was already listed as an ACV, was closed for a while after the sudden death of the licensed publican but reopened in May 2018. It has an intrinsic local character and is of historical significance.

7.5.6 The Station Public House

The public house opposite the railway station in Station Approach (postcode SG3 6AT) was listed as an ACV in February 2017, shortly before closure. It was closed subject to a planning appeal. The Planning Inspector has ruled that it should remain as a pub. It has great historical significance and facilities were used by community groups.

The Station Hotel was built in 1883 to service the new railway, making it one of the oldest buildings in 'new' Knebworth. Now called The Station Pub, the building is a prominent local landmark. A Parish Council consultation with local residents in June 2019, showed there was overwhelming support for saving this valuable social asset. The pub is now owned by Knebworth Parish Council which bought it with the help of a long-term loan from Central Government. Since then a small group has worked behind the scenes to develop a business plan, secure a loan, negotiate the purchase, select suitable tenants and complete the refurbishment. There was a very successful opening night on 14th February 2020. The pub also provides employment for local people as the tenants and staff all live in Knebworth.



Figure 32 The Lytton Arms PH (left) and The Station PH (right)

7.6 Policy KBW5 Allotments

KBW5 Allotments

A minimum of 1.5 Ha of land will be sought for use as allotments across all proposed major development sites, to meet local identified demand.

There are currently 15 allotment plots in use in Knebworth. They are popular and there is always a waiting list. New residents will bring additional pressure. The current allotments were on private land owned by an absentee landlord. In June 2020 the land was offered for sale and was purchased by the Parish Council as an asset for community use. If additional demand is identified, new allotment areas will be sought within proposed major development sites.

1.5 Ha of land will be sought for use as allotments in accordance with The Allotment Association recommendations of 20 plots per 1,000 dwellings. The Allotments Act 1950 allowed authorities to make provision for local demand, and to acquire land for providing allotments. The KPC will work with developers to identify suitable sites and use the standards in the 'Growing in the Community' (2nd Edition) (LGA, 2009) guidelines for managing allotments and will seek further designated areas for allotment provision.



Figure 33 Allotments between Watton Road and St Martin's Road

8 Policies -Schools

8.1 Introduction

The Schools working group was established following a clear indication from the initial survey that schools and education were of great importance to the residents.

Old Knebworth School was built in 1897 and enlarged in 1902 as the number of school children rose to 150. The current Knebworth primary school was built by HCC in 1912 to accommodate the ever-increasing population. Four extra classrooms were added in 1924 and it has been extended again since then. The new school originally accommodated all the elementary school children from the newer part of the village. Both schools taught children up to the age of 14, however, after serving the community for 93 years, Old Knebworth School was closed in November 1963 but continued as a private nursery school until the early 1990's.

From the comments received in the initial survey and at the KNP Open Days, it was evident that residents were extremely worried about future school provision and, in particular, the strain on the local primary school. Although considered to be a good school, concerns were raised about the challenges and capacity issues that would result from the large proposed housing developments. Comments included the view that history would be repeating itself, as with the developments in the 80s and 90s when local children had to travel to primary schools in other settlements due to lack of forward planning of capacity.

The following objectives relate to the policies on schools:

0. Ensure future school and pre-school provision meets local needs, is high quality, offers choice, and includes appropriate accommodation, adequate facilities and safe and convenient access routes

8.2 Policy KBS1 Existing Primary School

KBS1 Existing Primary School

Provision of new primary education facilities either through the construction of a new school or the expansion of the existing primary school should be designed to facilitate the joint use of spaces and equipment by the school and by the wider community. This will necessitate independent access to the school's facilities out of school hours.



Figure 34 Knebworth Primary and Nursery School now (left) in 1912 (right)

Knebworth School has been identified as of local heritage value (now termed a Non-designated Heritage Asset) as it takes the form of a typical early 20th century school which represents an early element of the social and educational growth of Knebworth (Register of Buildings of Local Interest, 2008, p. 69) Figure 34 (right) picture credit for Knebworth School in 1912 (Madgin, 2011).

8.3 Policy KBS2 NHDC Proposed New Primary School

KBS2 NHDC Proposed New Primary School

The site for a new primary school identified on KB2 in the NHDCLP should be safeguarded as green space at least until 2031 or until the school is built. If a school is to be built on KB2 all the following criteria will apply:

- a. the building of a school on this site should be thoroughly justified including assurances that there is no better alternative;
- b. the school should be located to the east of the site, as far as possible from the A1(M);
- c. air quality on the site is measured and monitored to ensure pollutant levels meet current standards in relation to schools at the time planning permission is sought, immediately prior to construction and as an ongoing requirement during the operating life of the school.

The grounds of Knebworth School, the existing primary school, border the southern portion of the District Council's proposed development site KB4). The option of expanding the school as part of the development of KB4 should be investigated as an alternative to the provision of a new primary school at the western edge of the village on the District Council's proposed development site KB2. HCC's preference for a school on the west side of Knebworth is only in the absence of an alternative option being presented to them. Knebworth Parish Council will work with HCC to achieve the best outcome for the siting of additional primary school accommodation to meet the needs of children in the village.

8.4 Policy KBS3 Pre-School

KBS3 Pre-school

Proposals for a pre-school either within or adjacent to the existing village school, or within or adjacent to a new primary school (co-located), to ensure that the facilities can be jointly used, will be supported.

Throughout the consultation exercises conducted during the preparation of the Neighbourhood Plan, comments were received about the lack of Pre-School provision for very young children with working parents. Pre-school provision should be provided in conjunction with increased primary school accommodation.

8.5 Policy KBS4 KB4 School Site

KBS4 KB4 School Site

The site for a new secondary school has been identified in the NHDCLP on the north side of Watton Road within the site allocation KB4. Proposals for development on this site should not be “inappropriate in the Green Belt,” as defined in the NPPF, until such time as the land is needed for a school.

Residents voiced their opposition to a proposal to build a secondary school in the village when it was last mooted in 2009. Feelings were voiced at a public meeting about the proposed school such as the comment that “Knebworth is a village and it’s important for it to stay a village” (The Comet, 2009). In 2011 plans for the secondary school were turned down by the government after 2000 residents signed a petition against it. The then Department of Education said that the plan could not proceed because of a lack of suitable sites (The Comet, 2011)

During the first round of hearings for the North Hertfordshire District Local Plan, Week 7, which took place in the last week of February 2018, HCC submitted a statement in relation to Matter 10/11 - Stevenage (Great Ashby, Graveley (including North of Stevenage) and Knebworth. The document number is 16452 Matters 11 Knebworth HCC (education) and can be found here: <https://www.north-herts.gov.uk/planning-policy/local-plan/local-plan-examination/hearing-sessions/hearing-timetable-and-statement-5>

The opening comments of their hearing statement said, “Hertfordshire County Council (HCC) considers that the proposed allocation of four hectares of land for education purposes at KB4 in Knebworth does not meet the identified demand for secondary school places in and around Stevenage.” Knebworth is included within the Stevenage secondary education planning area and included within the pupil forecasts for the area. There is no need for a secondary school in Knebworth.” (HCC, 2018, p. 1)

HCC went on to say that the proposed site allocation at KB4 does not support the County Council’s model of secondary schools. Secondary schools of at least 6FE are large enough to be financial sustainability and viable in the long-term. 4FE secondary schools face significant challenges in the current financial climate and are at a much greater risk of being unsustainable. HCC was very clear, that it does not support the establishment of new 4FE secondary provision on KB4 (HCC, 2018, p. 4).

Of even greater significance for this Neighbourhood Plan, HCC went on to say that as secondary education provision is not required in Knebworth an adjustment should be made to the proposed Green Belt boundaries to site KB4 to ensure that the allocation is reduced to exclude the land allocated for this requirement (HCC, 2018, p. 6).

In 2018 parents at the primary and pre-school were asked whether they would like to see a secondary school sited in Knebworth on KB4. Of the 36 replies received 58% said yes and 42% said no. This is reflective of the mixed feelings of residents in the village and the balance between the pros and cons of siting a secondary school here. At a Youth Forum meeting in October 2018 the young people present felt that the benefits might be outweighed by increased traffic congestion and that they wanted to choose their secondary school rather than being forced to go to a secondary school in Knebworth just because it was the nearest.

9 Policies - Environment and Flooding

9.1 Introduction

This section of the Neighbourhood Plan covers biodiversity, environmental pollution, energy conservation, flooding and drainage, important views and character areas, and heritage assets.

A set of policies have been written by the sub-group. As part of this process, each policy has been considered using many sources including central and local government, local knowledge and experience, environmental groups and industry standards.

The Objectives that were developed from the Knebworth Neighbourhood Plan Vision Statement and which led to the development of the Environment and Flooding Policies were:

- G. Promote best practice in environmental performance of all construction projects to achieve low energy usage, incorporate renewable energy initiatives, conserve water, re-use building materials, provide electric car charging points and ensure all new buildings are carbon-neutral**
- H. Require all new development to be of high-quality design and contribute towards Knebworth's character by being sympathetic to design of surrounding areas**
- K. Seek cost effective and innovative solutions to minimise the amount of land taken up with car parking**
- L. Retain the existing architectural character of the Garden Village, conservation areas and other heritage assets**
- M. Protect, enhance and increase accessibility to and the number of green spaces for recreational and health use**
- S. Provide guidance on eliminating air, light, soil, water and noise pollution**
- T. Lobby appropriate bodies to undertake required improvements to eliminate current flooding problems and ensure new development is designed to prevent future flooding issues**
- U. Protect key views and character areas from the negative impact of new development**
- V. Preserve existing and design integral wildlife corridors and habitats into new developments to improve biodiversity, reducing public lighting to the minimum needed to ensure residents' safety where light pollution impacts wildlife**

9.2 Policy KBEF1 Biodiversity

KBEF1 Biodiversity

In order to ensure a net gain of biodiversity and improve biodiversity overall, all developments must:

- a. wherever possible, retain existing trees, hedgerows and green road borders to minimize disruption to wildlife;**
- b. preserve existing and propose new wildlife corridors and habitats;**
- c. reduce or eliminate gaps in existing corridors by diverse planting;**
- d. create new corridors within developments to reduce built 'mass', enhance wildlife diversity and to increase surface water retention. Some should connect with new small wooded areas.**

Additional guidance provided by Hertfordshire Ecology and Hertfordshire and Middlesex Wildlife Trust, including use of a biodiversity calculator should be taken into account when assessing the ecological merits of planning applications.

This policy applies to all major developments. A net gain in biodiversity will be mandatory, in the new Environment Bill. More detail on how DEFRA hope to achieve this can be found in their Biodiversity 2020 strategy (DEFRA, 2020). Smaller developments may provide an opportunity to enhance green infrastructure and Sustainable Urban Drainage Systems (SuDS) create drainage pathways which can also function as wildlife corridors. Without wildlife corridors, animals may find it difficult to maintain healthy populations. Essential to the wildlife corridors is a wide variety of both deciduous and evergreen trees and shrubs. Over time, these small changes can make a significant difference.

Herts Environmental Record Centre have identified the historical siting of over 1100 species of both flora and fauna, along with their type, rarity/extinction status within Hertfordshire (compiled for the KNPSI during the preparation of the Plan). Of these, the 50 extinct or believed extinct species are all invertebrates (moths, butterflies and dragonflies). Many may have specific habitats for their food or lifecycle, and this could indicate that the specific ecosystems for their survival have been lost. A recent report, the State of Nature (State of Nature Partnership, 2019) has highlighted just how many species are at risk. These include butterflies and moths, plants, vertebrates, invertebrates as well as fungi and lichen.

The land surrounding Knebworth House includes a range of nationally important and declining habitats, rare plants and its ancient woodland is a SSSI. Knebworth's rich natural heritage includes Knebworth Woods Site of Special Scientific Interest (SSSI), eight Ancient Woodlands and 20 Local Wildlife Sites, listed in Appendix H to the plan. Knebworth's rich biodiversity should be secured for future generations.

New developments should, wherever possible, retain existing trees, hedgerows and green road borders to minimise disruption to wildlife. Wherever possible means that removal of mature trees will need justification and access to the sites should be through natural breaks. Removal of hedgerows and verges for access should only be considered as a last resort. In addition, care must be taken to ensure that tree roots are not damaged as they may extend well past the crown of the tree itself.

Prior to developments, a green infrastructure audit should be carried out. This will help to provide a checklist for potential improvements and identify possible links to existing green infrastructure. Natural England has a biodiversity calculator (DEFRA, 2020) and this (or recognised developer-independent equivalent) should be used prior to any major development to ensure that there is a baseline record of the site's biodiversity for future comparisons and assessments of the ecological impact.

Landscaping schemes in new developments should encourage healthier ecosystems, using a wider variety of plants to attract wildlife and be UK grown to help prevent the importation of diseases. SuDS features such as swales can create attractive green infrastructure for people and wildlife. The use of street trees can provide benefits such as shade, pollution reduction and reducing rainfall run-off, as well as being aesthetically pleasing.

9.2.1 Fauna

The protection of local wildlife remains a key government natural environment policy (MHCLG, 2019). Indeed, the government have recently stated that new homes need to be wildlife friendly. The recommendations include 'hedgehog highways' and hollow swift bricks as well as drainage areas that can create attractive wetlands for birds and amphibians whilst also providing a natural resource for those living nearby.

9.2.2 Flora

Knebworth is rich in flora. Within the past few years over 500 different species of wildflowers, trees, grasses and ferns have been recorded, as well as numerous types of lichen, liverworts and mosses. These can be found in the woodlands, fields, hedgerows, verges and copses throughout the parish. Knebworth Park contains important and nationally declining habitats notably the characteristics of acidic and heathy conditions (MHCLG, 2019). Knebworth Woods is the only Hertfordshire site where the scarce greater broomrape is found. Where road verges are either not mown or partially mown (such as in Old Lane, adjacent to KB4), this encourages a wide variety of wildflowers and helps wildlife to move around their territory.

Further information on Flora, Fauna and SuDS can be found in Appendix I

9.2.3 Existing trees, hedges and shrubs

Many of the roads within the parish are lined by mature hedges, with a mix of trees and shrubs that have become established over many decades. Where possible, these hedgerows should be retained and integrated into landscaping and urban design.

Hedgerows run through and around the boundaries of sites KB1, KB2 and KB4 in NHDCLP. Figure 35 shows existing mature hedges bordering Gypsy Lane. Figure 36 (left) shows a semi-mature oak tree and wide wildlife verge in Old Lane. These should be preserved in the planned development. Figure 36 (right) shows the southern end of Old Lane with its mature hedgerow on the right as well as a variety of mature trees in the gardens on the left.



Figure 35 Mature hedges and trees in Gypsy Lane from Orchard Way junction



Figure 36 Oak tree and unmown verge (Old Lane, south end) (left) and Entrance to Old Lane (south) (right)

9.2.4 Wildlife corridors

The whole parish and Knebworth village itself are fortunate to have many mature trees, hedgerows and gardens that can help wildlife move around the area (Figure 35). The trees depicted in Figure 37 (left) are the only remaining part of an original wood, called Pullins Spring (Madgin, 2011, p. 71).

Many of the trees in the parish have mature ivy growing up them as well as in the hedgerows. Ivy, although often maligned, is extremely beneficial to all kinds of wildlife such as butterflies and moths, insects, birds, bats and other small mammals. It provides food in the form of pollen, nectar and seeds, and since it is evergreen, year-round shelter (Woodland Trusts, n.d.).

It is important that as the parish becomes more developed new corridors are established for wildlife to move around and these should connect to new or existing woods. Indeed, it is also critical that when these new corridors are created, they take account of the wildlife's current territories to provide continuity of movement.

In addition, any wooded areas created must be of a size and contain enough tree varieties (preferably native or near native) to ensure that they are sufficient to support a healthy ecosystem. Without this, there is a risk of habitat fragmentation (Woodland Trust, n.d.). This can be caused by roads going through specific habitats or a reduction in size or quality of the habitat. Isolated, small patches of woodland can make it difficult for certain species to move between habitats potentially resulting in inbreeding or loss within that area. The dormouse

(last recorded in Knebworth Parish in 1975 (Herts Environmental Records Centre) is an example of a species affected by habitat fragmentation and changes in woodland management.

Hedges are preferable to fences as they act as a windbreak and are less susceptible to being blown over (Best4hedging, n.d.). In addition, hedges are more beneficial to wildlife. Generally, trees and shrubs that have single rather than double flowers are more desirable as this enables bees and other insects to easily access the nectar.



Figure 37 Mature hedgerows and trees lining London Road (left) and B197 towards Stevenage (from Deards End Lane) (right)

Old Lane has several asemi-mature oak trees dotted along it (Figure 36) as well as mixed hedgerows (elder, hawthorn, maple, brambles etc) and grassy verges with wild flowers. This is a boundary of KB4. Oak trees in particular are good for the local biodiversity as they can support around 2,200 species, which is more than any other native tree species (Action Oak, n.d.).

9.3 Policy KBEF2 Environmental Pollution

KBEF2 Environmental Pollution

To reduce environmental pollution in the parish, planning applications for major development must include all of the following considerations:

- a. provide a study of the levels of noise, air particulates and NO_x levels alongside any existing major roads or railway;
- b. ensure that the boundary of school buildings or children's play areas are drawn outside any areas that exceed minimum requirements for Particulates, NO_x, or noise emanating from the A1(M) or any other source;
- c. ensure that lighting from existing roadways and all new lighting does not impact the quality of life of new and existing residents or impact wildlife habitats and wildlife corridors;
- d. Ensure that the ground and ground water are not polluted through site spills and run-off.

Environmental pollution can take many forms. Waterways and ground water, and soil and air can be polluted by toxic material. Excess noise and too much artificial light are polluting

though possibly less obvious. All of these must be considered carefully and guarded against in any proposed development of Knebworth. The policy is aimed at major developments where they:

- contribute significantly to traffic movements,
- lead to noise/air quality effects,
- are located in sensitive areas (such as close to a source of noise/air pollution or an Air Quality Management Area),
- have the potential to pollute the ground or ground water during the construction process.

However, it must also be considered for smaller developments or extensions as part of the planning approval process to determine whether it will need to be applied.

It is important that new developments are supported by studies covering the impact of noise, air particulates and NO_x levels caused by nearby roads or rail. In particular, developers must be especially mindful of these forms of pollution in areas planned for schools or children's play areas. Furthermore, the impact of lighting should be considered on all housing as well as wildlife habitats and corridors. Finally, developers have a special responsibility to regularly monitor all potential forms of environment pollution, having agreed these with the relevant authorities, and publicly report the results.

Planning applications for any major developments in Knebworth should include assessments of these aspects and set out what measures will be taken to ameliorate any adverse conditions found. These studies need to be carried out at different times of the day as well as covering weekly and seasonal variations.

For sites KB1 and particularly KB2, as its eastern boundary is much closer to the road, noise and air quality measurements should be carried out at peak A1(M) traffic flow. These need to be measured at various locations including sites adjacent to the Park Lane bridge over the A1(M). Similarly, night-time readings of artificial light levels should be taken. Other studies should also cover levels of noise, air particulates and NO_x levels alongside the B197 and railway as well as site KB4 to allow a comparison between the sites. Lichens can be used as an indicator species to determine the level of pollution. (Air quality.org, n.d.)

During the development of a new property site, all relevant studies, such as environmental pollution, should be repeated at key milestones (such as the first block of dwellings being completed) to ensure that the measures taken have been successfully met the agreed criteria. If they are not, the shortcomings would need to be rectified before proceeding with further development.

9.3.1 Waterways and groundwater

While the Knebworth Parish has no large waterways, there are a number of smaller streams, watercourses, some subterranean, and ponds throughout. In site KB4 which is partly in a valley, runoff from fields, whether caused by development, flooding or the application of fertiliser, can contaminate the soil. This, in turn, would potentially adversely affect the local wildlife. Developers should take particular care during construction to ensure no building materials are allowed to contaminate the soil or to run off the site into adjoining waterways. Particular care should be taken in the storage of fuel and any bituminous or any other potentially polluting materials on site. This is to ensure there are no spillages that could drain into nearby waterways, or percolate into the local groundwater.

Soil is a natural asset that allows food, timber and other crops to be grown, as well as supporting biodiversity. It can act as a buffer against pollution and is a natural way to store water and carbon (British Society of Soil Science, n.d.) and (DEFRA, 2009). In the same way that waterways can be polluted, soil is also subject to similar risks. The Government publication on maintaining our soils contains guidelines for preventing soil pollution and protecting soil during development. (DEFRA, 2009). Guidance is also available on the sustainable use of soils on construction sites (Cranfield University, 2019).

Furthermore particulates, pesticides and fertilisers can leak into the soil (KB2 and KB4 both have adjoining arable fields). This leakage (depending on what the contaminant is) may reduce or increase its fertility and, as a result, damage the surrounding ecosystem. One instance of this is the increase in *Anthriscus sylvestris* (sheep's or cow parsley) along verges. These plants benefit from rich soil but crowd out other wildflowers which have adapted for poor soils.

9.3.2 Air pollution

Both sites KB1 and KB2 are close to the A1(M) and toxic particles from vehicle engine emissions and tyre and brake wear are likely to be carried by the prevailing winds over these sites. The concentration of the different contaminants reduces at different rates with distance from their source, some taking 500 metres to halve in strength. Developers of these sites will be required to monitor the level of the main air borne pollutants prior to applying for planning approval and to put forward measures that will be implemented to ensure that residents of the new developments will not be exposed to any air pollution above nationally accepted levels. Continuous monitoring equipment is preferred (particularly in the High Street and KB1, KB2 and KB4 developments) as this provides a more realistic assessment over both short and long timescales. Particular care must be taken in the evaluation of the suitability of the NHDCLP proposed site for a primary school in site KB2.

Hedgerows as well as being beneficial for wildlife can also help improve air quality. They can help deflect pollutants so that there are fewer contaminants at breathing height (Earth Sky, n.d.).

9.3.3 Noise

Within the parish, most intrusive noise comes from the traffic on the A1(M) and trains on the main railway line. Sites KB1 and KB2 are very close to the A1(M) and traffic noise is often carried by the prevailing south westerly winds across these sites and beyond. Studies have shown that peoples' health is damaged by traffic noise (Acoustical Society Foundarion, n.d.). Developers will be expected to perform a thorough assessment of noise levels across these sites prior to applying for planning approval. Once assessed, the developments should include ameliorative measures, such acoustic barriers and dense boundary planting, to reduce the ambient noise to acceptable levels. The effectiveness of the measures will need to be carefully monitored during and after development.

9.3.4 Light

Excess artificial light at night can have an adverse effect on all kinds of wildlife (IDA, n.d.) and (RSPB, n.d.). Currently, light pollution within the Knebworth Plan area is not believed to be a major problem as the section of A1(M) adjacent to sites KB1 and KB2 does not have motorway lighting, and the night-time traffic using the road is considered unlikely to adversely affect the proposed developments. The County Council's policy of switching off most streetlights between 1 a.m. and 5 p.m. and the use of LED lamps to concentrate light onto the road reduces

the adverse effect that artificial lighting can have on wildlife. Street lighting within new developments should follow these practices. However, developers should consider the potential for light pollution if motorway lighting is installed on the A1(M) or the county council's policy on lighting changes and build in contingency measures.

9.4 Policy KBEF3 Energy conservation

KBEF3 Energy Conservation

Development proposals must demonstrate the use of best practice in energy conservation, water conservation and the re-use of building materials to ensure all new buildings are carbon neutral in construction and in ongoing use (see also Policy KBBE2).

This policy is supportive and subsidiary to the Built Environment Policies in chapter 6. This is on the basis that the inadequate implementation of modern energy conservation practices, including carbon neutrality, in new developments would unfortunately increase the risk of pollutants, which would consequently adversely affect the biodiversity, ecosystems, wildlife and residents with in Knebworth.

On the outside, the use of plants can help to cool a building (Control Solutions INC, n.d.). However, the plants used should not be so vigorous that they cause other issues. Green roofs can help insulate properties and be attractive to both people and wildlife. The same technique can be used for disguising bin storage.

New developments should maximise natural light and natural air conditioning. The natural air conditioning technique was used when Trussell's the butchers was built, to ensure that the meat would not spoil (paragraph 9.8.3 143 London Road).

9.5 Policy KBEF4 Flooding and Drainage

KBEF4 Flooding and Drainage

All development proposals must be designed such that there is no net increase in surface water run-off and where possible, provides a reduction in surface water run-off. Proposals for rain-water storage and re-use will be considered favourably. Proposals that create non-porous ground cover within domestic curtilage, will not be supported.

Although this policy concentrates on managing flood risk, it also covers water conservation.

Prior to any development, a full assessment of the likely water flow patterns during normal rainfall and extreme events must be carried out. This includes assessing the effects on the water table, underground streams and springs. This is especially important in considering run-off from KB2 to Orchard Way, Broom Grove, into the village centre, where flooding is already an issue and beyond towards KB4. (for Surface Water Flood Risk Maps see Appendix J **Error! Reference source not found.** KB2, Gipsy Lane, London Road and KB4 can be seen to be at risk.

Any new properties close to these flows should be designed with Property Flood Resilience or Property Level Protection (often abbreviated to PFR or PLP) features from the outset, thus

minimising the costs of retrofitting and insurance claims that could potentially arise. Water Sensitive Urban Design (WSUD) should be considered from the outset. Many examples of good practice can be found in CIRIA's report, which also includes the results of a consultation with built environment specialists of whom 83% of respondents believed WSUD is generally considered too late in the design process (CIRIA, 2013). It is important that any future developments in Knebworth Parish properly address this risk proactively and in advance.

The impact of developments on the risk of flooding posed to both new and existing properties and drainage systems should be assessed, which could be prohibitively expensive in both retrospective cost and social impact if not properly designed. In addition, good maintenance practices for drainage and flood prevention measures should be specified.

In addition, soil structure can be easily damaged by the use of heavy machinery which can compact it if work is carried out in unsuitable conditions, especially when it is waterlogged or frozen (DEFRA, 2009, p. 21). When soil is compacted, its ability to absorb excess water is restricted which can lead to flooding and consequently adversely affect the local flora and fauna.

9.5.1 Historical flood evidence

Many locals are aware of roads that are liable to flood including Deards End Lane (south) and Old Knebworth Lane in addition to those shown below in Figure 38. These images are of the main road through Knebworth's shopping area which links the village with Stevenage to the north and Welwyn to the south and flooding in Orchard Way and Gun Lane Figure 39. London Road is the principal alternative route when there are traffic related issues on the A1(M).



Figure 38 Flooding in London Road



Figure 39 Flooding in Orchard Way (left) and Scout Hut in Gun Lane (right)

9.5.2 Flood risk within proposed sites

Roads bounding both Sites KB2 and KB4 have flooding issues (AECOM, Feb 2019). Gipsy Lane, the eastern boundary of Site KB2, has had a lot of work carried out (2018/19) to improve the drainage system, required due to run-off through KB2 from the A1(M) and the saturated field following several days of continuous rain. It is important to also note that the drainage report for Orchard Way states that the drainage system is only designed to cope with runoff from the A1(M) and is unlikely to cope with storm events (HCC, 2018). The A1(M) drainage lagoon is further south, beside Gipsy Lane. The images in the report highlight how critical suitable water management systems are as well as the importance of good maintenance practices (HCC, 2018)(Section 3.2, Pictures 1 and 2).

x



Figure 40 Water table outside Lytton Arms (2014) (left) and evidence of drainage improvements on Gipsy Lane

The NHDCLP Sustainability Appraisal, Section 1.3 Minimising pollution, (CAG Consultants, 2016) states that development should not be carried out on flood plains or areas of surface water flood risk. Both KB2 and KB4 have areas that are potentially at risk from surface water flooding. This potential for surface water flooding should be incorporated into an overall SuDS scheme. This would enhance the amenity for both residents, visitors and wildlife and have the potential to reduce future costs and flooding.

The benefits of SuDS can be seen in the case study report of Cambourne, Cambridgeshire by Interpave (Interpave, 2019). Although this was retrofitted to an existing development, it has been effective and popular with residents. The underlying soil is mostly clay. In the retrofitting, the natural water flows were optimised and integrated with the landscape design. This added both amenity interest and biodiversity. It also demonstrated lower construction and whole-life costs.

The use of SuDS will be critical to the success of any new development in Knebworth and in particular site KB4. This site contains both high and low risk flood zones running through the middle section, between Watton Road and Swangleys Lane. Sustainable drainage systems are a potential solution for managing these issues (AECOM, Feb 2019, p. 52).

9.6 Policy KBEF5 Important Views and Character Areas

KBEF5 Important Views and Character Areas

Important views and character areas (apart from those in the designated conservation areas) have been identified on the Policies Map and are detailed below:

View 1: Looking south from Stevenage along B197

View 2: Looking past Oakfields Avenue towards Bragbury End

View 3: Looking south east from Oakfields Road and Oakfields Avenue junction

View 4: Watton Road looking west from the Bell Close junction

View 5: Old Lane looking towards Bragbury End

View 6: Swangleys Lane looking west from Old Lane

View 7: London Road looking north from the southern parish boundary

View 8: St Martins Church, viewed from London Road

View 9: Gypsy Lane looking south east over Knebworth towards Datchworth

View 10 Looking west to Rustling End from layby on Codicote to Hitchin road

Character Area 1: Picton houses on east side of Stevenage Road

Character Area 2: Park Lane

These should be protected from the negative impact of any new development. Planning applications must include an assessment of the impact of development on the important views and character areas. Proposals where a harmful impact is identified will only be permitted where appropriate mitigation measures can be delivered.

The location and direction of important views and character areas is shown on the Policies Map. It is important for the amenity of the residents that these should be protected from the negative impact of new developments. Where planning applications are made in areas where these views and character areas are located (sites KB1, KB2 and KB4), the proposals should provide an assessment of the impact on the existing green infrastructure and wildlife and importantly, the appropriate mitigation measure that will be delivered.

There are also scenic views in Knebworth's conservation areas; Deards End Lane, Old Knebworth and Stockens Green which are covered by the NHDC conservation statements (NHDC, n.d.).

With its historic links with the Garden Cities of Welwyn and Letchworth, the village of Knebworth is approached from all directions by leafy tree-lined roads. Knebworth village lies within Landscape Character Area 37 'Datchworth Settled Slopes' in the North Herts Landscape Study (NHDC, 2011)

The following paragraphs provide a narrative on the important 'Views' in the parish that need to be preserved during new developments. Views 1, 4, 6 and 7 were chosen as representative of the approaches into Knebworth village while Views 2, 3, 5 and 9, which are much loved by residents and walkers, highlight how the village is separated from other settlements (see section 4). View 8 was chosen because St Martin's Church is a rare example of a religious building designed by Lutyens. Within the parish as a whole, there are many views of the undulating Hertfordshire countryside as well as mature trees and ancient woods, often with carpets of native bluebells. View 10 was chosen to represent these.

There are also two distinctive residential areas in the parish; Picton Houses on Stevenage Road and Oakfields Road, along with Park Lane (east of A1(M)). Unlike Views, there is no single point from which they can be fully seen, hence their classification as Character Areas.

Knebworth village (and the wider parish) contains many historically and locally important buildings and connections. Some of these have already been recognised as conservation areas (NHDC, n.d.). However, both the Picton Houses and Park Lane should be recognised and protected as they are representative of the Garden Village movement.

9.6.1 View 1: Looking south from Stevenage along B197



Figure 41 Looking south from the plant nursery towards Knebworth

A peaceful setting viewed from a position that is enjoyed by both the participants and customers of this important and well-loved local charity.

View 1 shown in Figure 41 is from the plant nursery currently known as 'Waste Not, Want Not', looking towards Knebworth. When this area is in full flower, it creates a colourful boundary between the nursery and the field. The B197 (Knebworth to Stevenage) is only distinguishable by a line of lampposts. This is a lovely rural view and its peaceful setting is a balm for both the volunteers and vulnerable people using the nursery. In the distance, the first few houses of Knebworth are just visible on the skyline as you look upwards over a rolling field. This will change colour through the seasons depending on the crop planted. From both scenic and social perspectives, the view provides a valuable resource within Knebworth's community. Any proposal for inappropriate development impinging on this view would be strongly opposed. Site KB4 in NHDCLP is situated just beyond the brow of the hill and should not rise above the skyline.

9.6.2 View 2: Looking past Oakfields Avenue towards Bragbury End



Figure 42 Looking past Oakfields Avenue towards Bragbury End (B197)

This view demonstrates the extent of the countryside in the parish and the village's rural atmosphere.

View 2 (Figure 42) looks towards Bragbury End and across the valley by Watton Road from the field entrance opposite Deards End Lane. There are mature trees and hedgerows both in the right foreground as well as the far distance. The attractive building visible is in Oakfields Avenue. This is a lovely rural view and epitomises the Hertfordshire countryside.

9.6.3 View 3: Looking south east from Oakfields Road and Oakfields Avenue junction



Figure 43 Looking south east from Oakfields Road and Oakfields Avenue junction

This is an important feature that helps define the village's rural character. It is much loved by ramblers and dog walkers.

View 3 (Figure 43) is recognised in the AECOM report (AECOM, Feb 2019)(section 4.6.1) as being an important part of the village's character. It looks towards the Watton Road across rolling countryside towards the dry valley south of Watton Road and is an important feature for the many dwellings that are adjacent to it. In addition, it is frequently used by ramblers and dog walkers.

It is recognised that this view overlooks part of KB4. However, there is a desire in the emerging NHDCLP to ensure that longer distance views into open countryside are maintained. These need to be fully considered in the design process with the active engagement of the stakeholders, particularly residents and others (such as walkers, school staff or pupils), to ensure that any proposal does not negatively impact on this view.

9.6.4 View 4: Watton Road looking west from the Bell Close junction



Figure 44 Looking into Knebworth from west

A tree lined entry into Knebworth that reflects the Garden City origins of the village.

View 4 shows a tree lined street which provides access into the centre of the village from the west (Figure 44). It is in keeping with the concept of the Garden Village and design principles underpinning the nearby Letchworth and Welwyn Garden Cities. Any future development would be expected to maintain the tree lined appearance.

9.6.5 View 5: Old Lane looking towards Bragbury End



Figure 45 Looking from Old Lane to eastern parish boundary

A view from a typical single-track road that provides a lovely aspect over undulating countryside for the many walkers who use it.

View 5 is from Old Lane which is a single-track country road, partly flanked by a mature hedgerow including elder, brambles and trees such as oak. Its verges are filled with wildflowers and their seeds. Looking away from Knebworth, undulating countryside can be seen (Figure 45). Residents have used this as part of a circular walk from the 'high street' which encompasses several other scenic views (View 4 and View 6). This view looks over towards Pinker Wood.

The eastern edge of site KB4 overlooks this view. However, maintaining this view will enhance the amenity of the new developments and will also help maintain separation from the outskirts of Stevenage and Bragbury End.

9.6.6 View 6: Swangleys Lane looking west from Old Lane



Figure 46 Swangleys Lane leading into Knebworth to the left and Old Lane to the right
A tree lined entry into Knebworth that reflects the Garden City origins of the village.

View 6 looks down one of the country roads leading into Knebworth with Old Lane joining it (Figure 46). Again, the road into Knebworth is tree lined and enhances the garden city feel.

9.6.7 View 7: London Road looking north from the southern Parish boundary



Figure 47 London Road looking north

A welcoming entrance into Knebworth with mature trees that lift the spirits.

View 7 looks into Knebworth on the London Road from Woolmer Green lined with mature hedges Figure 47. As the road approaches Knebworth, the large front gardens often have flowering trees which add to its attractiveness especially in Spring. Indeed, local residents have said that their spirits always lift when entering Knebworth village as the trees and hedgerows are so welcoming.

9.6.8 View 8: St Martin's Church, viewed from London Road



Figure 48 St Martin's Church (from B197)

A rare example of a religious building designed by Lutyens is seen in its green setting.

St Martin's Church and its extensive surrounding grounds are an integral part of village life (Figure 2). The graveyard (to left of church) is a peaceful location which has a calm atmosphere that can be enjoyed by both local residents and visitors to the village. This is probably the most looked upon view in the parish.

9.6.9 View 9: Gypsy Lane looking south east over Knebworth towards Datchworth



Figure 49 Gypsy Lane looking east over Knebworth towards Datchworth

A stunning view that opens up as you round the corner in Gypsy Lane and look east away from the A1(M).

View 9 (Figure 49) shows Knebworth village nestled in a wooded hollow with the hills in Datchworth in the distance. The view is visible through a gap in the mature hedges and across wide grass verges. Any development of the arable land in the foreground (part of KB2) would be expected to maintain this rural view.

9.6.10 View 10: Looking west to Rustling End from layby on Codicote to Hitchin road



Figure 50 View east towards Rustling End (from layby on B656 – Codicote to Hitchin)

This view highlights the rural areas within the parish, with some of its mature woodland visible in the distance.

View 10 (Figure 50) looks to the west over generous verges filled with wildflowers towards extensive bluebell woods. It provides a scenic view over the Hertfordshire countryside from the Codicote-Hitchin road towards Rustling End (behind the woods). Rustling End is towards the north-west boundary of the parish. If dwellings were to be built in this rural area, this view would be adversely affected. In addition, there would be a risk that there would be loss of separation between Knebworth and the adjoining villages or towns (see also Policy KBDS1).

9.6.11 Character Area: Picton Houses

The properties fronting the eastern side of Stevenage Road and along Oakfields Road are mainly fine examples of the type of house that would have most likely been built if the Knebworth Garden Village had been completed.

The majority are detached, individually designed, red brick properties with red clay tiles. Many were built between the two world wars by local builders, two of which were the Picton Brothers. Over time the houses have become collectively known as the "Picton Houses". The building plots were sold by Knebworth Estate with deeds stipulating the types of acceptable building materials. The use of consistent materials for the houses mean that the entire row has a harmonious feel to it. Moreover, the design variations between individual houses provide interest.

The Picton Houses in Figure 51, Figure 52 and Figure 53, with their attractive gardens bordering wide roadside lawns, present a picture typical of the best of Knebworth and should be retained for the benefit of current and future generations. Furthermore, they exemplify good design principles, and these principles should be integrated into any future new developments.

Even on dull winter days (see Figure 52), the houses are still attractive particularly once the trees have shed their leaves. The evergreen trees help to provide winter structure.



Figure 51 Variation in design between Picton Houses



Figure 52 Picton Houses in winter



Figure 53 Picton Houses along Oakfields Road

9.6.12 Character Area: Park Lane (east of A1(M))

Park Lane provides access from Codicote through the conservation area of Old Knebworth, crossing the A1(M) before it drops down into Knebworth village towards the Victorian Railway Station (Figure 55 (right)). It is flanked by mature hedges and trees throughout its entire length including the descent into Knebworth. When Park Lane enters Knebworth village, it contains an eclectic mix of houses and styles that range from the early buildings, others that have been in-filled and conversions of existing buildings.

Approaching Knebworth village a small collection of the older houses built prior to the expansion in the early 1900's can be seen on both sides of the road (Figure 54) and just beyond these at the entrance to Deards End Lane. They use both timber and flint as well as bricks in their construction and highlight the historical materials used in construction of dwellings.



Figure 54 Original buildings. The small building in the image on the left is a Grade II listed granary, which can be seen in both of the views along Park Lane

Park Lane itself is tree-lined on the left with many mature shrubs on the right (Figure 55). This reflects Ebenezer's Garden City vision of bringing the countryside into the town providing a rural feel even though it is close to the centre of Knebworth. A wide range of styles and size of buildings can be seen (Figure 56), although importantly, none are out of keeping with the village and Garden City concept.



Figure 55 Tree-lined descent towards Knebworth Railway Station and the station



Figure 56 Park Lane looking west from the railway station

As Park Lane descends into Knebworth village the Victorian Railway Station, opened in 1884, can be seen at the bottom of the hill (Figure 55) (Wikipedia, n.d.). Many current commuters use the station and enjoy the benefits of a rural residential situation while still having access to London.

Just before Park Lane becomes Station Approach, two community buildings become visible. These are the Village Hall and Trinity Church (Figure 57). Trinity Church is listed in the Register of Buildings of Local Interest (NHDC, 2008). Above the entrance to Trinity church, a moulding containing its original name of 'Congregational Church' and construction date of 1887 can be seen, demonstrating its use as a building of religious significance for well over a century. The Village Hall is proposed in the Neighbourhood Plan as a Non-designated Heritage Asset.



Figure 57 Knebworth Village Hall (left) and Trinity Church (right)

9.7 Heritage Assets

The origins of Knebworth can be traced back to the Domesday Book of 1086 where it was referred to as Chenepeworde. Knebworth House and Knebworth village have had a long and influential history not only on the parish, but also many other areas in England and abroad. The tree-lined approaches and leafy aspects of the village are due to the influence of Ebenezer Howard's concept of a Garden City on Victor, Lord Lytton and his brother-in-law, the architect Edwin Lutyens. Not widely known is that Lutyens designed more buildings in Hertfordshire than any other county except Surrey. Knebworth is lucky to have many examples of these. In the past, the Lutyens Trust has organised tours of Knebworth viewing properties in Deards End Lane, the Golf Club, St Martin's Church, the Church of St. Mary and St. Thomas and 'Homewood' in Old Knebworth (The Lutyens Trust, n.d.).

Knebworth Parish is fortunate to have one Grade I listed building (church of St Mary and Thomas) three Grade II* buildings (Knebworth house (Figure 58 (left)), Homewood and Church of St Martin) and 50 Grade II listed buildings (The National Heritage List for England, n.d.). The list includes not only houses but also barns, tombs, churches and even a milepost. These buildings cover the full extent of the parish from Knebworth village through the conservation areas of Deards End Lane and Old Knebworth to the westernmost boundary of Rustling End.

Although St Martin's is relatively modern – it was built in 1915 – it is significant as it was designed by Sir Edwin Landseer Lutyens who had close links with Knebworth and the surrounding area (see Figure 18 (left)). The church plans specified that it should be built from the finest materials and most of these were locally sourced or produced. Lutyens designed very few religious buildings, and St Martin's is seen as part of his work that led to the design of Liverpool Cathedral.

The milepost (Figure 58 (right)) is interesting as it reflects the change in parish boundaries in 1911 as Knebworth was originally in the parish of Datchworth (Madgin, 2011).



Figure 58 Grade II* buildings - Knebworth House and Milepost opposite Trussell's butchers.

9.7.1 Archaeological and below ground remains

Knebworth Parish also contains important archaeological sites including three Scheduled Monuments. Two of these are surviving upstanding barrows in Graffidge Wood to the west - the first scheduled area contains a prehistoric (late Neolithic or Early Bronze Age) bowl barrow and a rare Romano-British barrow, the other a bell barrow of prehistoric date.

Should a development have potential to impact on any potentially significant archaeological remains an appropriate archaeological investigation should take place, as per NPPF paragraph 189: "Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation", and as per Policy HE4 of NHDCLP (NHDC, 2016). Should archaeological remains of significance be identified appropriate steps should be taken to mitigate the impact of development on the identified asset.

9.8 Policy KBEF6 Non-designated Heritage Assets

KBEF6 Non-designated Heritage Assets

Development proposals that affect non-designated heritage assets, which are not already statutorily protected through listing or scheduling, will be permitted provided that the scale of any harm or loss is balanced against the significance of the asset.

A number of Non-designated Heritage Assets are described in the Knebworth Register of Buildings of Local Interest (NHDC, 2008) including: War Memorial, Park Lane; The Lytton Arms, Park Lane; Old Nursery School, Park Lane; Rose Cottage, Park Lane; Trinity Church, Park Lane; Knebworth School, Swangleys Lane; No. 115 London Road; Hillcroft No. 7 Deards End Lane; Woodland No. 18 Deards End Lane; St Thomas More Catholic Church, No. 72 London Road; Knebworth Railway Station, Station Approach; The Station public house and outbuilding, Station Approach; and The Cottage, Three Houses Lane.

In addition, the following buildings are worthy of protection as Non-designated Heritage Assets:

- Knebworth Village Hall
- 1, 3 & 5 Station Road
- 143 London Road
- 23 Station Road

This policy also applies to any Non-designated Heritage Assets which may be identified in the life of the Neighbourhood Plan.

A new initiative was launched in September 2019 by the Ministry of Housing that will help to ensure local buildings that are preserved for future generations (CLG, n.d.) by encouraging Non-designated Heritage Assets to be identified during the preparation of neighbourhood plans. Local heritage can help the community thrive as well being of interest to both residents and visitors.

NHDC Register of Buildings of Local Interest contains 15 entries in total, of which ten entries are in Knebworth village, four are in Old Knebworth and one is in Three Houses Lane (western parish boundary). Many of the buildings relate to Lutyens and the development of the railway.

Unfortunately, 111 London Road, though still retaining the same basic silhouette, appears to have lost much of its finer detail following its redevelopment. This can be seen when comparing the images in the original listing and current images. It is important that care is taken in securing the essence of these buildings as and when they are redeveloped or repaired.

9.8.1 Knebworth Village Hall

The Village Hall (see Figure 57 (left)) is situated in the Park Lane Character Area. Outside, the building has attractive pale pink plasterwork for the ground floor with black stained timber detailing on the main and side entrances that picks up the black line at the base of the walls. Inside, there is a large main hall and stage with a striking exposed beam roof and wooden

floor. The Village Hall is not listed as a designated asset but there is a compelling case for it to be included (NHDC, 2008).

9.8.2 1, 3 & 5 Station Road

These Lutyens designed shops, 1, 3 & 5 Station Road (See Figure 3 (right)), are attractive 2 and a half storey red brick building with original tiled roof and three pitched roof gables, occupied by three local businesses.

9.8.3 143 London Road

Trussell's butchers, 143 London Road - formerly Farrin's (Figure 59 (right)) has been a butcher's shop for many years (Madgin, 2011, p. 56). It was the first shop to open in London Road and was originally built to ensure that the meat did not receive excessive heat and cause the contents to go off as refrigeration was not widely available at the time.

It is constructed of red brick with interest created by the use of vertical timber boarding details under the gables and original tiled roof and chimney remaining. The attractive sash windows have an unusual three panel window layout (18 over 3 panes).

9.8.4 23 Station Road

Jacob House, 23 Station Road is now occupied by Burgess & Sons (Madgin, 2011, p. 43) (Figure 59 (left)). It is located opposite Trussell's butchers. It originally contained a grocer's shop with Post Office and a bakery next door.

The key features of the property are the red brick with dentil course under each gable and rubbed red brick arches over windows.



Figure 59: 23 Station Road (left) & Trussell's Butchers 143 London Road (right)

10 Policies - Traffic, Transport and Parking

10.1 Introduction

Knebworth village is fairly well served by road, rail and bus services. The village centre lies along the B197, a secondary road that links Stevenage to the north and Welwyn Garden City to the south. The village is linked to Old Knebworth and villages to the west by Park Lane and to the east and Hertford by Watton Road. The railway from Knebworth Station provides services to Stevenage (for Peterborough and the North) and Cambridge, Welwyn Garden City and London. Buses link the village with Stevenage, Welwyn Garden City and less frequently with Luton and Hertford. There are some segregated footpaths within the village but generally pedestrians, cyclists and people with disabilities and mobility problems are not well catered for, particularly linking west and east of the railway. The majority of working residents commute to work; the 2016/17 survey showed that 47% use car, 42% use rail, 5% use bus, 2% cycle (Knebworth Parish Council, 2019).

Amongst the traffic and transport concerns of the villagers are:

- congestion in the 'high street' i.e. Insufficient road width for bi-directional flow between parked vehicles.
- minimal village-centre off-street parking.
- railway commuter parking in residential roads.
- peak period through traffic using B197 as an alternative to the A1(M).
- the lack of disabled access to the rail station platforms.
- sub-standard pedestrian access under the railway bridges.

The Objectives that were developed from the Knebworth Neighbourhood Plan Vision Statement and which led to the development of the Traffic, Transport and Parking Policies were:

P. Find a solution to the 'high street' traffic and parking problems

Q. Negotiate for the provision of disabled access to rail station platforms

R. Support and encourage use of sustainable modes of transport including ensuring access roads through new developments are suitable for bus routes and prioritise active travel

In addition, several objectives related to other topics refer to improved accessibility for all, which is also an objective of this topic.

The long-term effect of COVID19 is impossible to predict. It is probable that there will be a substantial increase in working from home and a reduction in travel both by personal transport and public transport. Also, there could be more local journeys by walking and cycling. However, the Transport, Traffic and Parking Policies in this Neighbourhood Plan will still apply.

10.2 Policy KBT1 Sustainable Modes of Travel

KBT1 Sustainable Modes of Travel

Developers should consider transport issues throughout the village from the earliest stages of development proposals so that:

- a. opportunities to promote walking, cycling and public transport use are identified, pursued and integrated with any existing village routes, and**
- b. the needs of people with disabilities and reduced mobility for all modes of transport are addressed.**

The reduction of dependence on private, particularly fossil-fuelled cars is supported.

Development proposals should give people the choice of travelling by means other than private car; should encourage the use of sustainable transport and; should provide or facilitate the provision of electric car charging points, car-pools, and bus services within and between new developments, rail station and village car parks.

The Government's revised National Planning Policy Framework (NPPF, Feb 2019, p. 30 & 32) states (in Sections 102, 104 and 110) that transport issues should be considered from the earliest stages of development proposals so that opportunities to promote walking, cycling and public transport use are identified and pursued. Also applications for development should give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas, address the needs for people with disabilities and reduced mobility in relation to all modes of transport and create places that are safe, secure and attractive which minimise the scope for conflict between pedestrians, cyclists and vehicles. This hierarchical approach is supported by Hertfordshire County Council's Local Transport Plan 4 (LTP4) (HCC, 2018, p. 45) and North Herts District Council (NHDC, 2017, p. 51 & 52).

If the NHDCLP is implemented then Knebworth's population could grow by 30% by 2031, almost 50% greater growth than the average for Hertfordshire (21%). With new development will likely come a growth in car usage. As the NHDCLP proposes no additional employment in Knebworth, commuting to work from the village is also likely to increase.

HCC Travel Plan (HCC, 2018, p. 26) predicts that car trips in peak periods will increase by 17%-18% across the county. It is probable that this increase could be higher in Knebworth, particularly as Knebworth has one of the highest rates of car ownership in North Hertfordshire (NHDC, 2017, p. 40)

Given the local traffic congestion in the village 'high street' in peak periods and when there are problems on the A1(M) and also the parking problems around the village, the Parish Council supports proposals that encourage change of travel mode away from the private car to more sustainable forms of transport. This accords with NHDC Transport Strategy policy of ensuring new developments have sustainable transport "built-in" (NHDC, 2017, p. 51)

The community aspiration is that new development should positively encourage the use of sustainable forms of transport. A switch to walking and cycling may be encouraged by improving the safety and quality of existing routes and facilities. Both forms of movement would benefit from safer links across the railway. Cycling should be encouraged if a safe link could be provided to join up with the segregated cycle network in Stevenage and with National

Cycle Route 12 which currently passes to the west of the village. Diverting some buses through new residential developments and to the rail station in peak hours may encourage greater use of both transport forms and reduce rail commuter parking. The provision of electric car charging points and shared mobility solutions is supported by HCC (HCC, 2018, p. 53) and NHDC.

10.3 Policy KBT2 Traffic Impact

KBT2 Traffic Impact

Developments should not significantly add to traffic congestion in the village, or to motor vehicle flows on rural lanes, and should provide good pedestrian, cycle and bus connections into Knebworth and the wider area and improve the existing pedestrian and cycling infrastructure.

Proposals for the development of any of the sites KB1, KB2 and KB4 must provide traffic assessments that consider the cumulative impact of all three development sites, both during construction and on completion, upon key routes, junctions and rail crossing points for all users, including pedestrians, cyclists and people with mobility problems, and secure necessary improvement measures.

Any other large development proposals (10 or more properties) in the village and surrounding rural area must provide a traffic assessment of its impact, both during construction and on completion, on the highways in the Neighbourhood Plan area.

Funding for the rail crossing point improvement measures is to be secured, and where practicable the measures are to be implemented, before any properties in the developments of KB1 and KB2 is occupied.

Funding for any necessary improvements to the key junctions is to be secured, and where practicable the improvements are to be implemented before the developments of KB1, KB2 and KB4 are occupied.

The National Trip End Model predicts a 17% increase in traffic on Hertfordshire's roads between 2015 and 2031 (HCC, 2018, p. 26). It is recognised by HCC and NHDC in their Transport Plans that the B197 acts as an alternative route for traffic avoiding the regular congestion on the A1(M). This situation is exacerbated when accidents or breakdowns occur on the motorway. NHDC state that their modelling shows that even with the introduction of a Smart Motorway system between junctions 6 and 8 of the A1(M), there is likely to be some increased traffic through villages such as Knebworth (NHDC, 2017, p. 82).

Currently the local congestion caused by on-street parking in the 'high street' may act as a deterrent to some motorists using the B197 to avoid the A1(M). However, if this congestion is removed, positive traffic management measures should be introduced to slow down and restrict through traffic to maintain safety for pedestrians and cyclists. A smooth flow is desirable to minimise pollution.

Several of Knebworth's secondary roads (Deards End Lane, Swangleys Lane, Gypsy Lane and the eastern section of Watton Road) are rural in nature and layout and pedestrians, cyclists and motor vehicles share the narrow carriageways. The Parish Council broadly supports HCC's Local Transport Plan 4 policy that where new developments occur the related transport

infrastructure should be designed and implemented with the aim of maintaining the existing character of the area, avoiding instances of community severance and maintaining residential and rural characters of the adjoining area (HCC, 2018, p. 53 & 54).

In proposals for the development of KB2 and KB4, the opportunity should be taken to utilise existing narrow country lanes (Gypsy Lane and Old Lane, respectively) as pedestrian/cycle routes (plus vehicular access to existing dwellings) and provide separate routes for carrying traffic to/through new developments.

As the NHDCLP chooses to treat development in Knebworth piecemeal (unlike the treatment of other communities in North Herts with a potential total increase of over 500 properties e.g. Royston, Hitchin, Baldock), the Parish Council strongly contends that the traffic implications of the total proposed developments should be assessed and that each developer should contribute proportionately to an overall Community Infrastructure Levy (CIL) or section 106 contribution, to fund ameliorative measures. This approach is supported by AECOM (AECOM, Feb 2019, p. 57). As is the requirement that developers provide a Transport Assessment / Transport Statement and Construction Environmental Management Plan for each site at the planning stage. The NPPF also requires developers to provide a Travel Plan and Transport Assessment so that the likely impact of their proposals can be assessed, (NPPF, Feb 2019, p. 32).

The village to the west of the railway line is very poorly linked for pedestrians and cyclists. At both rail under bridges single sub-standard footways adjoin narrow carriageways which have blind bends on their approaches. There is insufficient footway width for pedestrians to pass (DTp & CLG, 2007), (AECOM, Feb 2019, p. 24) and substantial numbers of commuters pass under the Station Road bridge. Currently all children walking to and from the primary school from the western part of the village need to use these routes. Alternate direction traffic signal controlled vehicular traffic would allow for the footways to be widened and would be safer for cyclists. Alternatively, extending Knebworth station's pedestrian subway to Kerr Close may improve pedestrian safety and allow the widening of the roadway under the bridge.

The northern footway of Park Lane from KB1 site boundary to the station is narrow in sections and will require improvement to safely cater for the expected increase in pedestrians from the proposed new development. Similarly, the access to the existing Primary School needs improvement to reduce the potential conflict between school children on foot or cycles and vehicular traffic using Swangleys Lane, particularly those children walking from dwellings in KB4. Alternatively, provide a new access to the Primary School, from within the southern part of KB4, removing, or minimising access from Swangleys Lane.

HCC's policy with regard to accessing rail travel is that rail users should be encouraged, where feasible, to use sustainable transport modes for the "last mile" of their journey to access stations, principally bus, cycling and walking (HCC, 2019, p. 10). In the KNP Action Plan, item 10 seeks to obtain land on the edge of the village for rail commuter parking to accommodate additional commuters from proposed developments in Codicote and Woolmer Green, thus reducing demand for on-street parking near the station.



Figure 60 Pedestrian congestion under railway bridge

The community aspiration is that new developments should cause minimal traffic disruption during construction and, when completed, should improve existing conditions at known problem locations in the village to the benefit of all current and future residents of the village.

10.4 Policy KBT3 On Street Parking

KBT3 On Street Parking

Development proposals should minimise on-street parking on residential roads, and increase off-street public parking in the village centre, or provide off-street railway commuter parking, if possible.

All types of developments are expected to meet the NHDC's minimum off-street parking provision. Any proposals that do not meet these standards will not be supported, neither will developments which add to the burden of on-street parking, or which encourage parking on footways.

On street parking, impeding the traffic and pedestrian flow on residential roads, is a continuing and very emotive issue in the village. Conversely, the viability of the village centre businesses is dependent on having sufficient on and off-street parking for customers and employees. Getting the right balance between free and charged-for parking is an ongoing problem. Free limited time parking in the 'high street' helps the businesses and maintains traffic at a safe speed for pedestrians to cross, but sometimes impedes traffic flow. The KPC continues to seek an acceptable solution with NHDC/HCC.



Figure 61 Conflict in the ‘high street’ between vehicles and pedestrians (left) and between delivery vehicles, buses and cars (right)

Recent surveys show that rail commuter parking occupies most of the available space in the residential roads within 400 metres of the station during weekdays (Knebworth Parish Council, 2019). The station car park only has 48 charged for spaces which are usually fully occupied. Rail passenger numbers are predicted to increase by 40% by 2040 (Network Rail, 2018) therefore, it is likely that the demand for long stay car parking will increase accordingly. Incentives to encourage car sharing by rail commuters and the diversion of some bus services through new developments on the edge of the village to stop at the station at peak rail usage times may ameliorate this problem. Expanding the controlled residential parking zones should be investigated. This could reduce this inconvenience to residents, but it could also lead to rail commuters parking in more distant parts of the village or moving to other stations thus reducing the usage and eventually the viability of Knebworth station. The provision of some dedicated, long stay, off-street parking funded by developers’ contributions would also help.

The community aspiration is that there is a reduction in the amount of obstructive and obtrusive on-street parking in residential roads. The provision of sufficient suitable off-street parking to cater for rail commuters and for ‘high street’ shoppers would contribute to achieving this aspiration.

10.5 Policy KBT4 ‘High Street’ (London Road) Traffic Issues

KBT4 ‘High Street’ (London Road) Traffic Issues

Developer contributions will be sought to fund a formal study, with the aim of providing the optimum solution for the ‘high street’ (London Road) to:

- Reduce the potential for accidents and damage, for both parked and through traffic;
- Enhance the safety of pedestrians and cyclists and;
- Retain sufficient on-street parking to support local businesses.

Congestion in the ‘high street’ and peak period traffic using the B197 to avoid the A1(M) are already major concerns to villagers. Since HCC LTP4 predicts that car trips in peak periods will increase by 17%-18% across the county (HCC, 2018, p. 26), the situation is unlikely to improve without positive remedial action.

Traffic congestion in the village 'high street' during peak periods and at times when there are problems on A1(M), is such that the risk of, and actual, damage to vehicles is increased, and through-traffic diverts into parallel, unsuitable, residential village roads to avoid the delays. Additionally, the emissions, noise and density of the congested traffic makes the 'high street' a less attractive place for pedestrian shoppers. The community aspiration is to increase the safety and attractiveness of the village's 'high street'.



Figure 62 Queuing traffic coming from Stevenage (left) and in the 'high street' (right)

Conversely, the implementation of temporary traffic lights in November 2018, and reduced parking in the 'high street', caused significant tailbacks at either end, substantially increased speed through the 'high street' and had a marked negative impact on 'high street' businesses, as much of their business is from 'passing, non-local' trade en route to Stevenage, Welwyn, and beyond.

The primary school, and the combined library, dispensing chemist and the new doctors' surgery are all to the east of the 'high street', whilst the bulk of the proposed new housing is to the west of the 'high street', thus increasing the expected amount of pedestrian movement across the 'high street' and the potential conflict with vehicular traffic.

The NPPF paragraph 106 states that local authorities should seek to improve the quality of parking in town centres. (NPPF, Feb 2019, p. 31). Hopefully a study, financed by developers, will produce a workable solution that is practical, and is acceptable to businesses, residents and road users.

A longer-term solution may be to widen the 'high street' to meet national planning design guides for carriageway, pavement and parking bay widths (CLG, 2019). As frontage properties are developed in future the building line should be brought back to be at least 7 metres from the existing carriageway centre to allow continued social distancing on the pavement.

10.6 Policy KBT5 Bus Routes

KBT5 Bus Routes

Developments should provide a suitable route for public service buses through developments on sites KB1 and KB2, so that no dwelling is more than 400 metres from a bus stop.

One of the objectives is to encourage people to change from private cars to using public transport. This is more likely to happen if the distance to a bus stop is relatively short. The Institution of Highways and Transportation suggests 400 metres maximum convenient walking distance to bus stops in an urban context (Guidelines for Providing Journeys on Foot, 2000), (AECOM, Feb 2019, p. 24). Diverting the current service (44/45 Luton – Stevenage) through proposed developments on KB1 and KB2, at least at peak rail usage times, would provide public transport to the rail station and village centre. There may be scope to combine future Section 106 funding for developments planned for Codicote, which is also served by the 44/45 to pay for service enhancements to this route.

The community aspiration is that new and existing properties should be within a convenient walking distance of regular bus services, that serve the station and village centre and link the village with neighbouring towns.

11 Policies – Implementation

11.1 Introduction

The Neighbourhood Plan will primarily be implemented through the determination of planning applications by NHDC. The Neighbourhood Plan policies will provide a local focus to ensure decisions benefit the local community and will protect those assets most appreciated by residents. Major developments and associated infrastructure will be achieved principally through agreements between the local planning authority, developers and infrastructure providers.

The Neighbourhood Plan policies may be amended at intervals in order to remain in line with the Local Plan and any such review will be carried out by Knebworth Parish Council in accordance with the process and procedures in place at that time.

11.2 Policy KBI1 Spending Priorities

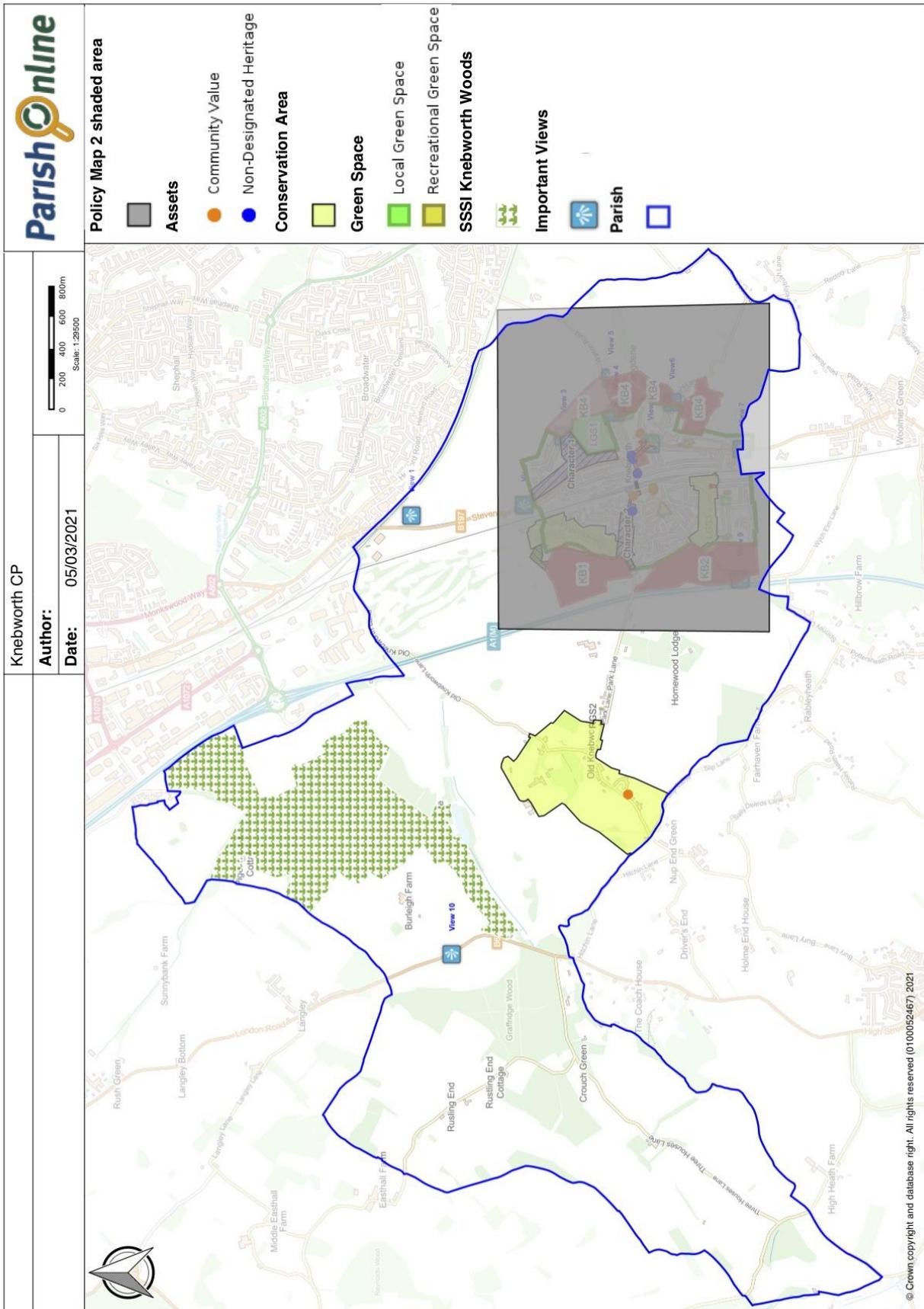
KBI1 Spending Priorities

Spending priorities will be delivered through S106 agreements, the Community Infrastructure Levy (if set by North Herts Council) or other funding streams, in accordance with the priorities set out in this plan. Funding derived from development in Knebworth should directly benefit Knebworth residents. The list of projects identified in the Action Plan (Appendix E) will be reviewed twice a year by Knebworth Parish Council.

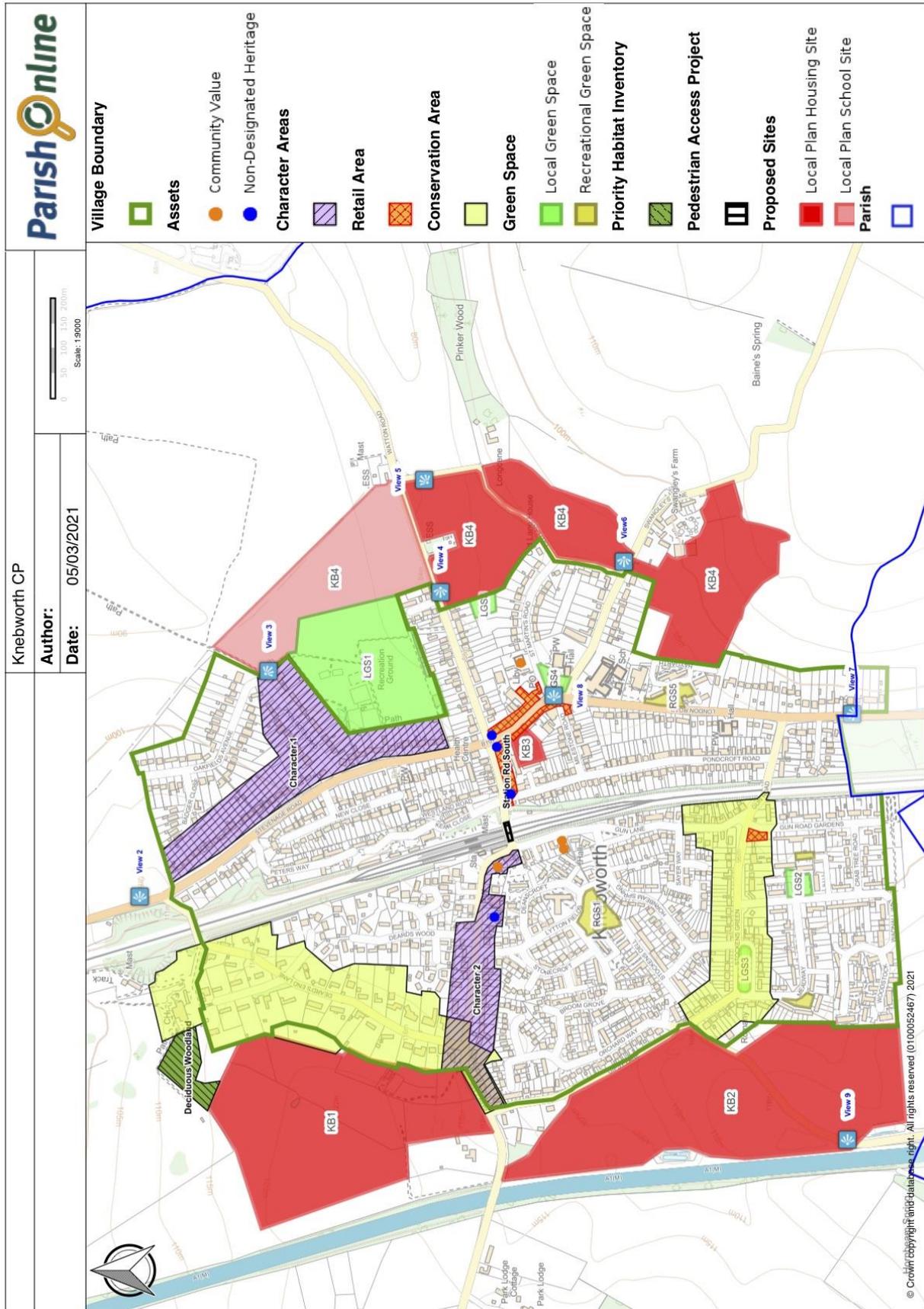
A number of non-land use proposals have been put forward during the various community consultation events and surveys of residents. These have been worked up into potential projects in consultation with Knebworth Parish Council and have been included in the Action Plan in Appendix E . These projects/tasks will require prioritising by the Parish Council, and where necessary, funding sources assigned.

Funding mechanisms will vary for each project and may be from both public and private funding sources. The Action Plan should be taken into account by developers when submitting planning applications for development in Knebworth Parish and by the NHDC and HCC when negotiating Section 106 Agreements. Funding from development in Knebworth should directly benefit Knebworth residents. Discussions are ongoing with HCC and NHDC on how this can be achieved.

Appendix A Policies Map



Policies Map Shaded Area



Appendix B Objectives Mapped to Policies

Objective		Related Policies
A.	Maintain the distinctiveness and separation of Knebworth from nearby towns and villages	KBDS1: Retention of separation KBDS2: Housing density KBEF5: Important Views and Character Areas
B.	Support existing employment locations within the built-up area and encourage new employment opportunities throughout the parish	KBLE1: New businesses KBLE2: Rural businesses KBLE4: Community businesses
C.	Encourage and support a diverse range of retail and service uses in the village centre, retain and protect the 'high street' retail frontage and retain the two public houses	KBLE1: New businesses KBLE3: Existing businesses
D.	Encourage the provision of suitable buildings for small scale businesses (including community shops) within new residential developments	KBLE1: New businesses KBLE4: Community businesses KBW1: Community Facilities and Services
E.	Encourage the growth of home-based businesses including the provision of shared workspaces	KBLE1: New businesses KBLE2: Rural businesses KBLE5: Home working KBLE6: Telecommunications
F.	Ensure all new developments are inclusive and accommodating to the different needs of local residents including affordability and accessibility.	KBBE1: Housing mix KBBE3: Accessibility and adaptability KBBE5: Masterplanning and Placemaking
G.	Promote best practice in environmental performance of all construction projects to achieve low energy usage, incorporate renewable energy initiatives, conserve water, re-use building materials, provide electric car charging points and ensure all new buildings are carbon-neutral	KBBE2: Sustainable buildings KBEF2: Environmental Pollution KBEF3: Energy conservation KBEF4: Flooding and Drainage KBT1: Sustainable Modes of Travel
H.	Require all new development to be of high-quality design and contribute towards Knebworth's character by being sympathetic to design of surrounding areas	KBBE4: Design KBBE6 Site KB1 Land at Deard's End KBBE7 Site KB2 Land off Gipsy Land KBBE8 Site KB4 Land east of Knebworth

Objective		Related Policies
I.	Retain the existing architectural character of the Garden Village, conservation areas and other heritage assets	KBW4: Valued Community Assets KBBE4: Design KBEF6: Non-designated heritage assets
J.	Create attractive, easily accessible safe neighbourhoods through good design following the principles of 'Placemaking'	KBBE4: Design KBBE5: Masterplanning and Placemaking KBW1: Community Facilities and Services KBT1: Sustainable Modes of Travel KBT2: Traffic Impact
K.	Seek cost effective and innovative solutions to minimise the amount of land taken up with car parking	KBT3: On-street parking
L.	Ensure that all current and future community facilities, amenities, medical resources and service provision are inclusive, easily accessible and do not diminish in terms of quantity and quality to serve the growing population	KBW1: Community Facilities and Services KBW3 - Recreational Green Spaces KBW5: Allotments KBT1: Sustainable Modes of Travel
M.	Protect, enhance and increase accessibility to and the number of green spaces for recreational and health use	KBW1: Community Facilities and Services KBW2 - Local Green Spaces KBW3 - Recreational Green Spaces KBW5: Allotments KBEF1: Biodiversity KBEF2: Environmental Pollution KBT1: Sustainable Modes of Travel
N.	Identify options for provision of a community information space	KBW1: Community Facilities and Services Action Plan
O.	Ensure future school and pre-school provision meets local needs, is high quality, offers choice, and includes appropriate accommodation, adequate facilities and safe and convenient access routes	KBW1: Community Facilities and Services KBS1: Existing Primary School KBS2: NHDC Proposed New Primary School KBS3: Pre-school KBS4: KB4 School Site KBT1: Sustainable Modes of Travel
P.	Find a solution to the 'high street' traffic and parking problems	KBT1: Sustainable Modes of Travel KBT2: Traffic impact KBT3: On-street parking KBT4: 'High Street' (London Road) Traffic issues KBT5: Bus Routes Action Plan
Q.	Negotiate for the provision of disabled access to rail station platforms.	KBT1: Sustainable modes of travel KBT2: Traffic impact Action Plan

Objective		Related Policies
R.	Support and encourage use of sustainable modes of transport including ensuring access roads through new developments are suitable for bus routes and prioritise active travel.	KBEF3: Energy conservation KBT1: Sustainable modes of travel KBT2: Traffic impact KBT5: Bus Routes Action Plan
S.	Provide guidance on eliminating air, light, soil, water and noise pollution	KBEF2: Environmental Pollution
T.	Lobby appropriate bodies to undertake required improvements to eliminate current flooding problems and ensure new development is designed to prevent future flooding issues	KBEF4: Flooding and Drainage Action Plan
U.	Protect key views and character areas from the negative impact of new development	KBW1: Community Facilities and Services KBW2: Local Green Spaces KBEF5: Important Views and Character Areas
V.	Preserve existing and design integral wildlife corridors and habitats into new developments to improve biodiversity, reducing public lighting to the minimum needed to ensure residents' safety where light pollution impacts wildlife	KBW2: Local Green Spaces KBEF1: Biodiversity KBEF2: Environmental Pollution KBT2: Traffic Impact

Note: Policy KBI1 ensures that the Neighbourhood Plan will stay up to date and that projects identified in the Action Plan will be funding through new development, where appropriate.

Appendix C Community Facilities and Services

COMMUNITY FACILITIES AND SERVICES

Site description	Category	Information	Used by Community
Knebworth Village Hall	Hall	Licensed for 200	Yes
St Martins Parish Centre	Hall	Suitable for 90 (+ 30 seperately)	Yes
St Thomas More Church Hall	Hall	Small hall	Yes
Scout hut and land	Hall	Small hall	Yes
Pavilion, Knebworth Recreation Ground	Hall	Suitable for 30	Yes
Royal British Legion Hall & social club	Hall	Hall	Yes
St Martins Church (C of E)	Church	List entry Number 1174371	Yes
Trinity Church and Hall	Church	Medium sized hall for 100	Yes
St Thomas More Church (RC)	Church	Church	Yes
St Marys Church (C of E)	Church	List entry Number 1295771	Yes
Station Pub, Station Approach	Public House	Reopened February 2020	Yes
The Lytton Arms, Old Knebworth	Public House	Reopened May 2018	Yes
Railway Station car park	Car park	Car park	Yes
St Martins Road public car park	Car park	Car park	Yes
Railway Station	Buildings	0.5Million passengers p.a.	Yes
Post Office, St Martins Road	Buildings	Shop	Yes
Knebworth School and playing fields	Buildings	Public use may resume in future	Yes
Library, St Martins Road	Buildings	ACV temporarily suspended	Yes
Public toilets, St Martins Road car park	Buildings	Toilets	Yes
War Memorial, Park Lane Old Knebworth	Monument	List entry Number 1420192	Yes

Appendix D Local Green Space Assessment

Site description	NP X-ref	LOCAL GREEN SPACE ASSESSMENT																
		Site Information			Critical Criteria			Evidence										
		Potential development site in local plan	National designation or right of way	Common land or village green	Private garden	Owner known	Insufficient evidence or criteria	Extant planning permission	Local in character	Extensive tract	Demonstratively special	Reasonably close 300m approx	Beakly	Tranquillity	Intrinsic local character	Historical significance	Recreational	Natural wildlife
Knebworth Recreation Grounds, off Watton Road	LG51	N	N	N	N	Y	N	N	Y	N	Y	Y	Lime avenues	Tranquil in parts	Public Walk	Part of the design of the garden village	Multiple uses but break clause 2029	Pond in particular
Cherry Close Green	LG52	N	N	N	N	Y	N	N	Y	N	Y	Y	Exceptional trees		Only open space for surrounding homes with very small gardens.	Communal open space for a large housing area - social space.		
Green, Stocklens Green	LG53	N	N	N	N	Y	N	N	Y	N	Y	Y	Very attractive	Yes - no ball games	Yes - part of the conservation area - has the appearance of a village green	No		
Green, St Martins Green	LG54	N	N	N	N	Y	N	N	Y	N	Y	Y	Attractive		Used for picnics	Used for events		
Allotments, Watton Road	LG55	N	N	N	N	Y	N	N	Y	N	Y	Y	During growing months.	Very	Characterful entrance to centre of village similar to village green.	Yes for growing food and flowers but access over other landowners land	Yes - butterflies, etc.	
The Green, Park Lane, Old Knebworth	LG56	N	N	N	N	Y	N	N	Y	N	Y	Y	Pretty	Yes	Only one in Knebworth	Events have been held in the past	Great Crested Newts	
Gymkhana Field, New Cricket Ground, Old Knebworth	LG57	N	N	N	N	Y	N	N	Y	N	Y	Y	Attractive	Yes	Part of the surrounding homes	New site of Cricket Club		
Land opposite war memorial on southern side of Park Lane	LG58	N	N	N	N	Y	N	N	Y	N	Y	Y			Local character as part of estate	Bench stopping place for cyclists and walkers		
St Martins Church Cemetery, St Martins Road	LG59	N	N	N	N	Y	N	N	Y	N	Y	Y	Attractive trees	Yes	Significant at Remembrance Day	Closed cemetery	Yes	
St Marys Church Cemetery, Old Knebworth	LG510	N	N	N	N	Y	N	N	Y	N	Y	Y	Beautiful	Yes very	Local character surrounding church	Closed cemetery	Yes	
Lytton Fields play space	RG51	N	N	N	N	Y		N							Important recreational space we would like to protect.	Younger children's equipment/ dog walking, at risk of break clause		
King George V play space	RG52	N	N	N	N	Y		N						Yes and rural.	Play space.	1940's King George's Playing Field held by Fields in Trust	No-cut area for wildlife. New hedge but traditional.	
Cherry Close play space	RG53	N	N	N	N	Y		N						Tranquil	Important to look out over for residents	Yes		
Amenity land, Meadway	RG54	N	N	N	N	Y		N					Attractive		Only green space for residents who have no gardens	Communal open space for a large housing area - social space.		
Amenity land, Haygarth	RG55	N	N	N	N	Y		N					Trees with TPO's					
Common, Stevenage Road																		
Common, Norton Green																		
Amenity land, Bellamy Close																		
Amenity land, Gun Lane																		
NHDC Cemetery, Wadnall Way																		
Kerr Close																		
Peters Way																		
Corner Oakfields Avenue/Road																		
Knebworth Golf Club																		
Knebworth Park Cricket Club																		
Knebworth Park and Gardens																		

Appendix E Action Plan

This Action Plan contains projects/tasks arising from consultation on the Neighbourhood Plan. These projects/tasks will require prioritising by the Parish Council. And where necessary funding sources assigned.

No.	Project / Task	Timetable	Project Lead	Effect of non-implementation	Outcome sought / Objective
Built Environment					
1	Obtain (free) off-street parking for shoppers in St. Martin's Road car park.	Ongoing	PC to liaise with NHDC. Consider for Section 106 of CIL funding.	Limited growth of trade for retail businesses	Increased use of village shops and other services
2	Install electric vehicle charging points at PC 'owned' sites, e.g. Village Hall car park, Watton Road Recreation Ground.	Ongoing	PC through funding from developers, electric car manufacturers etc.	Slower change from fossil fuel vehicles	Make the use of electric vehicles by local residents more viable and attractive
3	Set up a Place-making Action Group	In place when first major housing development application submitted	Neighbourhood Plan Steering Group establish a group to comment on development proposals	Unimaginative, standard estate layouts.	Influence urban design to strengthen connection between people and places they share. Public spaces within developments are the heart of the community.
Wellbeing					
4	Actively seek to obtain a new indoor and outdoor sports hub, to include an all-weather pitch, new pavilion, changing rooms and social facilities	Ongoing	PC through appropriate funding bodies. Knebworth Football Club liaison with KPC to develop new or improve existing sports facilities. Some funding available. Consider for Section 106/CIL funding.	Unlikely to attract more residents to participate in healthy sports activities. Continued travel by car to alternative sports facilities for practice and playing sessions.	Have modern and attractive sports facilities that allow local sports clubs to develop and is available to the general community
6	Lobby for additional G P's and health professionals based in the village	Ongoing	Request Knebworth and Marymead Medical Practice Patient Participation	Longer waiting times to see a health professional with a likely increase in visits to Hospital A	Have sufficient medical staff to provide an acceptable service that meets current needs of the area

No.	Project / Task	Timetable	Project Lead	Effect of non-implementation	Outcome sought / Objective
			Group to raise with relevant Health Authorities	and E departments	and future needs of a 30% increase in population
7	Improve the Scout and Guide hut in Gun Lane	Asap	Volunteers with PC guidance. Consider for Section 106 or CIL funding	Further deterioration of buildings, becoming unsuitable for use	Improved facilities to cater for expected increase in young people from development
Environment and Flooding					
8	Create community woodland areas	Asap	Establish Volunteer Trust. Consider for Section 106 or CIL funding	Steady loss of accessible woodland	Improve the local environment and wildlife habitat
Traffic, Transport and Parking					
9	Obtain disabled access to station platforms	Ongoing	PC and user groups to lobby rail service providers	Continued inaccessibility of platforms for those with reduced mobility, and parents/ carers with children in prams/pushchairs	Easy access to trains for all residents. Updated disabled parking tariff - free in all locations provided blue badge is displayed.
10	Implement a solution to the 'High Street' traffic and parking problems	Ongoing.	PC to liaise with HCC-and NHDC. Set up volunteer working group to find innovative solutions and advise PC. Consider for Section 106 or CIL funding	Continued conflict between through traffic, parked vehicles and pedestrians with its negative effect.	A safer and less congested High Street that is attractive to shoppers
11	Obtain segregated cycle route between Knebworth and Stevenage cycleway network	Asap.	PC to liaise with HCC. May be provided as part of draft HCC North Central Growth and Transport Plan.	Cyclists deterred from using un-segregated cycle path on unrestricted hill section of B197	Provide safer cycling and encourage more cycle trips
12	Obtain land for off-street parking for rail commuters	Before major housing developments in Knebworth neighbouring villages	PC to liaise with landowners and major developers. Consider for Section 106 or CIL funding.	Increased conflict between residents and rail commuters for on-street parking space	Reduce adverse effect of increased rail commuter parking expected with development of Knebworth etc.

No.	Project / Task	Timetable	Project Lead	Effect of non-implementation	Outcome sought / Objective
13	Obtain an extension of rail station foot access tunnel to Kerr Close	Before major housing developments west of Knebworth	PC to lobby rail companies	Continued safety issues for pedestrians walking under railway bridge	Motor traffic free pedestrian link between western and eastern parts of the village.
14	Obtain extra capacity on rail services stopping at Knebworth	Ongoing	Request Knebworth Rail User's Forum public group to lobby rail service operators	Overcrowded carriages over longer peak periods	Improved capacity on rail services to cater for the expected increase in demand
15	Obtain additional eastbound services (through Codicote, and Old Knebworth passing Knebworth Station) in am rail commuting peak and in reverse during pm peak	Before major housing developments in Codicote and west of Knebworth	KPC to liaise with Herts CC, NHDC and the bus service provider. Consider for Section 106 or CIL funding.	More rail commuter parking demand in roads around Knebworth Station	Encourage rail commuters to use the bus in preference to private car to access Knebworth Station
16	Widen footway under Station Rd rail bridge with appropriate traffic management scheme	Prior to occupation of KB1 or KB2	KPC to liaise with HCC (Highways). Consider for Section 106 or CIL funding.	Worsening of conditions for pedestrians and cyclists.	Improved safety for road users, particularly pedestrians and cyclists
17	Widen footway under Gun Lane rail bridge with appropriate traffic management scheme.	Prior to occupation of KB1 and KB2	KPC to liaise with HCC (Highways). Consider for Section 106 or CIL funding.	Worsening of conditions for pedestrians and cyclists	Improved safety for road users, particularly pedestrians and cyclists
18	Improve pedestrian and cycle facilities Stevenage Rd/ Watton Rd/ Station Rd/ London Rd junction	Prior to occupation of KB1, KB2 or KB4	KPC to liaise with HCC (Highways). Consider for Section 106 or CIL funding.	Worsening of conditions for pedestrians and cyclists	Improved safety for road users, particularly pedestrians and cyclists
19	Improve layout of London Rd/ Swangley's Lane junction and access to Primary School	Prior to occupation of KB1, KB2 or KB4	KPC to liaise with HCC (Highways). Consider for Section 106 funding.	Worsening of conditions for pedestrians and cyclists	Improved safety for road users, particularly pedestrians and cyclists
20	Use part of the parking area off Kerr Close for rail commuter parking	Useful if rail station foot access tunnel extended	PC to liaise with Knebworth Village Trust regarding lease	Continued level of on-street rail commuter parking	More off-street long-term parking for the expected increase in rail commuters

Appendix F Abbreviations and Glossary

ABBREVIATIONS

ACV	Assets of Community Value
DEFRA	Department of Environment Food and Rural Affairs
CIL	Community Infrastructure Levy
dph	Dwellings per Hectare
HCC	Hertfordshire County Council
HQM	Home Quality Mark
KNP	Knebworth Neighbourhood Plan
KNPSC	Knebworth Neighbourhood Plan Steering Committee
KPC	Knebworth Parish Council
LGS	Local Green Space
NHDC	North Hertfordshire District Council
NPPF	National Planning Policy Framework
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Urban Drainage System

GLOSSARY.

2011 Census - The results of the national statistical survey carried out in 2011.

Action Plan – A set of instructions to follow in order to solve a problem and to achieve an objective that is desirable for improvements that do not fall within the planning remit.

AECOM - International consultancy company provided through Locality, see below.

Affordable Housing - Housing made available, based on the evidence of need, to people who are unable to afford housing at market prices, including Social Housing available to rent.

Ancient Woodland - Woodland known to have existed continuously since at least 1600.

Assets of Community Value - A right for Communities to nominate certain local and public or privately-owned buildings or land as an Asset of Community Value.

Biodiversity - The numbers of different species as well as their genetic diversity within a particular habitat or ecosystem as well as their interactions and interdependencies.

Brownfield Site - Land that has been previously developed.

Character Area – Area of distinctive historic and aesthetic value.

Community Facility – An essential and indispensable local feature such as a public building, service, utility, place or green space that contributes a welcome comfort, convenience or enjoyment in a neighbourhood.

Community Infrastructure Levy (CIL) - Is a planning charge used as a tool by local authorities to help deliver infrastructure to support development in their area.

Conservation Area - An area designated under Section 69 of the Town and Country Planning Act 1990 as being of 'special architectural or historical interest', the character and appearance of which it is desirable to preserve and enhance.

Construction Management Plan - A plan detailing how construction will be managed in order to ensure the effects of construction on residents and businesses are kept to a minimum.

Co-working - Offices generally ideal for start-up businesses and entrepreneurs looking for a better alternative to working from home. See also Shared Workspaces.

Designated Heritage Asset - World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.

Developer Contributions (or S106 Contributions) - Contributions required under a Section 106 agreement or planning obligation under Section 106 of the Town and Country Planning Act 1990 (as amended) from developers for works and services directly related to the development and focused on site-specific mitigation of the impact of development.

Development Plan - Statutory Plans, including Local or District Plans and Neighbourhood Development Plans which are used to determine planning applications.

Ecosystem - A complex system of habitats and environments that are interrelated. Including organic life; flora, fauna, fungi, as well as the inorganic materials; rocks, pebbles and minerals.

Environmental Pollution - Pollution of waterways and ground water, soil, air, noise and artificial light.

Evidence Base - The information, comment and needs discovered by the Steering Group following various consultations with the parish community, enquiries made of interested parties and stakeholders and a determination of those issues and impacts which will have a bearing and consequence on Knebworth and the life of the community, over the next 15 years.

Examiner - An independent expert, sanctioned by Locality, who will be appointed by NHDC to examine the Knebworth Neighbourhood Plan submitted by KPC/KNPSG to ensure that it meets the "Basic Conditions" set by law for a Neighbourhood Plan. If the plan meets the Basic Conditions, with or without modifications, the Examiner will recommend to the NHDC that it proceeds to referendum.

Flood Plain - An area of land liable to flood from a watercourse, defined by the Environment Agency.

Garden City - A Garden City is a holistically planned new settlement that enhances the natural environment and offers high-quality affordable housing and locally accessible work in beautiful, healthy and sociable communities.

Garden Village - Developments which, to varying degrees, aspire to the principles of Garden Cities, albeit at a smaller scale.

Green Corridor - A wildlife corridor, habitat corridor, or green corridor is an area of habitat connecting wildlife populations separated by human activities or structures (such as roads, development or logging).

Green Infrastructure - A network of green spaces and other features, such as parks, open spaces, woodlands, playing fields, allotments and gardens providing a range of quality-of-life benefits for the local community.

Greenhouse Gases - any [gas](#) that has the property of absorbing [infrared radiation](#). [Carbon dioxide](#), [methane](#), and [water](#) vapour are the most significant greenhouse gases.

Grey Water - Gently used household wastewater that can be reused for some purposes without purification.

Habitat - Specific conditions or environments required for an organism to thrive. Dormice require deciduous woodland, hedgerows and scrub and for these to be connected rather than isolated.

Habitat Fragmentation - When a specific habitat is altered in some way so that it becomes two smaller habitats. Wildlife within each smaller habitat may have insufficient genetic variety to thrive, particularly if they are unable to reach other parts of the original habitat.

Hedgehog Highways - Allow hedgehogs to roam through back gardens to find food and nest sites. This may be as simple as leaving gaps below fences, which other creatures can also use.

'high street' - Local term in Knebworth for that section of London Road with shops.

Home Quality Mark - The Home Quality Mark (HQM) is a national standard for new homes, which uses a simple 5-star rating to provide impartial information from independent experts on a new home's design, construction quality and running costs. HQM will also show the impact of the home on the occupant's health and wellbeing.

House in Multiple Occupation (HMO) - A single dwelling rented by at least three people, not from the same household, operating under licence from the local council.

Housing Associations - Independent, not-for-profit organisations that work with councils to offer flats and houses to local people on the Housing Register.

Infrastructure - Basic services necessary for development to take place, for example roads, electricity, internet provision, sewerage, water, education and health facilities.

Lifetime homes - Ordinary homes designed to incorporate design criteria that can be universally applied to new homes at minimal cost. Adding to the comfort and convenience of the home and supporting the changing needs of individuals and families at different stages of life

Listed Buildings - Any building or structure which is included in the list of 'buildings of special architectural or historic interest' as defined in the Planning (Listed Building and Conservation Areas) Act 1990. They are Designated Heritage Assets.

Local Green Space - Is where the green space is in reasonably close proximity to the community it serves; where the green area is demonstrably special to a local community and holds a particular local significance, for example because of its beauty, historic significance, recreational value (including as a playing field), tranquillity or richness of its wildlife.

Local Plan - The NHDCLP covering amongst other issues, development and infrastructure in North Hertfordshire.

Local Referendum - A vote for electors in the Neighbourhood Area to accept or reject the Neighbourhood Plan.

Local Wildlife Site - Wildlife-rich sites selected for their local nature conservation value containing important, distinctive and threatened habitats and species. A principal wildlife resource but non-statutory designation. Their only protection is through the planning system.

Locality - The body established by Her Majesty's Government which, in addition to other

duties, monitors and provides advice and support/funding to enable the creation of Neighbourhood Plans for local communities in England & Wales.

Made - Term used for a Neighbourhood Plan, having been approved at referendum and adopted by the Local Authority. It is then an integral and legally binding part of the Local Plan.

Masterplanning - Making the connection between buildings, social settings and their surrounding environments. A master plan includes analysis, recommendations and proposals for a site's population, economy, housing, transportation, community facilities and land use.

Mitigation - Measures taken to lessen the force or intensity of the effects of a development.

Modular Building - a construction method that involves constructing sections away from the building site. Buildings or houses that consist of repeated sections called modules.

National Planning Policy Framework (NPPF) - Sets out national policy and how this is expected to be applied.

Neighbourhood Development Plan - See Neighbourhood Plan.

Neighbourhood Plan - An element of the Localism Act 2011 through which local communities can influence and sometimes control development and growth in their Designated Area.

Neighbourhood Plan Designated Area - The area within which the effect of a Neighbourhood Development Plan is deemed to be in operation.

Non-designated Heritage Assets - Buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of heritage significance meriting consideration in planning decisions but which do not meet the criteria for listing.

NOx - Nitrogen Oxides which contribute to air pollution and formation of e.g. acid rain or smog

Objective - An aim or a goal to assist in achieving the overall vision for the area.

Open Space - All open space of public value including land, river, canals, and lakes.

Parish - The area covered by the Knebworth Neighbourhood Plan as submitted to NHDC.

Picton houses - Distinctive style of house built by a company of local builders based, at that time (circa 1920-1940), in London Road, Knebworth. Proprietors William Picton and Benjamin Percival Picton.

Place Making - The process through which we work together to shape our public spaces and involves the planning, design, management and programming of shared use spaces.

Pre-submission - See Regulation 14 Consultation.

Preferred Options - NHDC Consultation in late 2014 which sought the views on their preferred options for future development in North Herts.

Property Flood Resilience (PFR) or Property Level Protection (PLP) - An Environment Agency programme to protect properties at risk from or that have previously been flooded from fluvial and surface water flooding.

Qualifying Body - A Parish or Town Council which is responsible for producing a Neighbourhood Plan in its parish or town.

Regulation 14 Consultation - The statutory consultation conducted by the Qualifying Body (here KPC) to the Neighbourhood Plan being submitted to the NHDC.

Regulation 15 Submission - Where a qualifying body (here KPC) submits a plan proposal to the local planning authority (NHDC), it must include a map or statement which identifies the area to which the proposed neighbourhood development plan relates; a consultation statement; the proposed neighbourhood development plan; and a statement explaining how the proposed neighbourhood development plan meets the requirements of paragraph 8 of Schedule 4B to the 1990 Act, the Basic Conditions.

Saved Policies - The policies which are currently applicable to housing and development in North Hertfordshire in the absence of a new Local Plan which is being drafted by NHDC.

Shared Space - A design approach that aims to reduce the dominance of vehicles by reducing or removing traffic signs, road markings and in some cases kerbs, resulting in 'level surfaces'

Shared Workspace - An office shared with other businesses. See also Co-working spaces.

Sheltered Accommodation - Purpose built or converted housing exclusively for sale to elderly people; self-contained accommodation with communal facilities and warden.

Significant Development - A development of a scale sufficient to trigger the requirement for a Transport Assessment in accordance with *Roads in Hertfordshire: Highways Design Guide 3 Edition* e.g. residential development in excess of 80 units.

Sir Edwin Landseer Lutyens - English architect noted for his versatility and range of invention along traditional lines and who was the consulting architect for a development plan for Knebworth Garden Village in 1910.

Soil Structure - the way in which soil particles - sand, silt, clay as well as organic and inorganic matter - are arranged.

Strategic Environmental Assessment - Considers the environmental effects of a plan.

Strategic Policies - Those Saved Policies and future policies forming the NHDCLP with which the Neighbourhood Plan must be in general conformity.

Strategic Housing Land Availability Assessment (SHLAA) - a technical assessment to identify potential new land suitable, accessible and available for housing, to meet e.g. NHDC's required housing needs, as part of the evidence base for e.g. NHDCLP.

Sustainable Development - Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

Tenure blind - Houses for sale and houses built for the council to let are purposefully made similar in design so as to mask the tenures.

The Plan - See Neighbourhood Plan.

Vernacular - A local style of architecture for homes and domestic buildings

View - A pleasing sight seen from a particular place

Vision - Description of how the community would like their area to be in the future.

Wildlife Corridor - These are links between similar habitats (possibly those that have been fragmented), that allow wildlife to move between the habitats. New corridors take account of the wildlife's current territories to provide continuity of movement.

Zero Carbon or Carbon Neutral (for new homes) - Achieving net zero carbon emissions by 'balancing' a measured amount of carbon released with an amount of carbon offset. This assumes that new development can be designed to take CO2 out of the carbon cycle.

Appendix G Acknowledgements

The Knebworth Neighbourhood Plan Steering Committee would like to express their thanks and appreciation to the following people and organisations for their invaluable help and involvement with the development of this Neighbourhood Plan:

- Members of the Neighbourhood Plan working groups for:
 - Traffic, Transportation and Parking - aiming to improve infrastructure and parking issues
 - Local Economy, including retail, restaurants and bars
 - Environment and Flooding - all aspects of conservation and pollution
 - Built Environment, which covers housing density and character
 - Schools and Education - covering pre-school, primary and secondary provision
 - Wellbeing, which includes medical and public services, and environment, views and local green spaces
- Knebworth Parish Council for embarking on the project, funding and councillor support
- North Herts District Council Officers for their advice and guidance
- Locality for funding
- Knebworth Parish News Magazine for publishing news updates
- All the businesses and organisations who have displayed posters and hosted survey collection boxes
- Residents and businesses who have helped with delivery of leaflets
- Landowners and developers who engaged with the group, shared their aspirations for their sites and supported the process.
- All those who responded to the parish survey, business survey, sport and leisure survey, Estate Agents' survey, plus the two parking surveys in Great Ashby and Knebworth.
- The Steering Committee members who conducted the above surveys, plus a local Wildlife Survey
- Knebworth Primary and Nursery School pupils and teachers
- Knebworth Scout and Guide leaders
- Youth Project volunteers and group members
- A local historian for the background information of the development of Knebworth.
- The consultants, Govresources, for their professional support and input to the Plan
- Photographs submitted - some photographs may be from unknown sources – no copyright infringement is intended - thanks to all who originated these photographs.
- Knebworth WI for their efforts in continuing on a regular basis to re-plant the Knebworth sign planters at each end of the village and the photographs of the results.
- Waste Not Want Not plant nursery for their contribution to the plants/planters themselves
- HCC Flood Risk Management (Andy Flagstaff, Team Leader).

THANK YOU

Appendix H Wildlife Sites

The following sites are Nationally or Locally designated sites:

1 x SSSI

Knebworth Woods

6 x Ancient Woodlands (many of which also have LWS status *)

Graffridge* /Winter Woods

Newton/Cannocks Woods

Node Wood

Park Wood

Soot Wood/Briary Spring*

Watery Grove

There is also a long list of veteran and mature trees in Knebworth Parish.

20 x Local Wildlife Sites (non-statutory local designations)

Holl Lays Wood

Crouch Green Meadow

Church Wood (near Knebworth)

Node Wood*

Graffridge Wood*

Graffridge Meadows (part)

Soot Wood/Briary Spring* (part)

Peartree Wood & Roundwood Dell

Kitching Green Lane (small part)

Garston Meadow (Norton Green)

Plantations S. part Newton Wood

Knebworth Park

Park Wood*/Home Wood

Crouchgreen Woods

Burleigh Farm

Burleigh Farm Meadow

Rusling End Meadow

Rusling End Meadow South

Disused Chalk Pit by Knebworth Railway

New Wood (near Rabley Heath)

Appendix I Flora and Fauna and Examples of SuDS

Flora in Knebworth

The Knebworth Neighbourhood Plan area is rich in flora. Within the past few years over 500 different species of wildflowers, trees, grasses and ferns have been recorded, as well as numerous types of lichen, liverworts and mosses. These can be found in the woodlands, fields, hedgerows, verges and copses throughout the Plan Area.

Many of the flowers found in Knebworth are considered “vulnerable” or “near threatened” in England, including field scabious, wild strawberry, harebell, quaking grass, heath speedwell, and ragged robin (Herts Flora Group, n.d.). Many trees and shrubs are also found in the parish and include mature oaks, horse chestnuts, ash and field maple.

Knebworth Park contains important and nationally declining habitats notably the characteristics of acidic and heathy conditions (MHCLG, 2019). Knebworth Woods is the only Hertfordshire site where the scarce greater broomrape is found. In 2014 the heath dog-violet was found in flower at a heathy corner of the Knebworth Park by Wintergreen Wood (Herts Flora Group, n.d.). English bluebells (*Hyacinthoides non-scripta*) also carpet these woods in spring. Their flowers provide an early source of nectar for bees, hoverflies, butterflies and other insects (Woodland Trust, n.d.). True bluebells are coming under threat due to habitat destruction, collection from the wild and crossbreeding (hybridisation) with non-native bluebells.

Where road verges are either not mown or partially mown (such as in Old Lane, adjacent to KB4), this encourages a wide variety of wildflowers including field poppies, teasels and field scabious (*Knautia arvensis* – on the vulnerable list (Herts Flora Group, n.d.)). These verges provide habitats for smaller creatures, bees and other insects as well as supplying food (nectar, pollen, seeds) throughout the year. It also provides nesting material and sites for hibernation or overwintering. In addition, the unmown verges help wildlife to move around their territory.

Late summer verges provide support for wildlife. Flowers include scabious and knapweed.



Roadside verges with wildflowers (left layby B656, right Old Knebworth Lane by A1(M) underpass.



Late summer food for wildlife (hedge opposite Gypsy Lane north)

Rich hedgerows can be in food for wildlife in just a short stretch of hedgerow. The photographs above show hawthorn (*Crataegus monogyna*), blackberries (*Rubus fruticosus*), White dead nettle (*Lamium album*), immature ivy flowers (Woodland Trusts, n.d.). The hawthorn and blackberry both flower in spring with seeds in late summer to autumn, while the dead nettle flowers from March to December. Ivy provides flowers from September to November followed by seeds from November to January.

Fauna in Knebworth

Many species, such as badgers and hedgehogs, have their own network of tracks. Hedgehogs can often range 2-3km a night and have home territories of 1-20 hectares (Hedgehog Street, n.d.). Badgers may have averages home ranges of 50 hectares (Badgerland, n.d.), although this can range from 30 – 300 hectares depending on the quality of the habitat.



Hedgehog and badger visiting local garden (Deards End Lane)

Within Knebworth parish, a survey was carried out over a one-month period (10th June - 9th July 2019) in a residential plot of 0.45 hectares, in the village's principle residential area (and close to KB1). It used 4 strategically placed cameras and was supported by additional personal observations (Nation, 2019). The survey provides a snapshot of the type of wildlife found in Knebworth which includes mammals (such as badgers, foxes, hedgehogs and the more unusual polecat), amphibians (frogs, toads), grass snakes and a wide variety of birds including nuthatches, robins, wrens, hawks and owls. It should be noted that polecats are of conservation significance as they are now making a comeback from 'extinction' and are spreading into East Anglia (Vincent Wildlife Trust, n.d.).

In a separate garden (in Old Knebworth, approx. 0.1 hectares) various insects have been recorded (or seen) over the past few years. These include: Six-spot Burnet moth (*Zygaena filipendulae*), Rhopalid Bug (*Corizus hyoscyami*), shield bugs, stag beetle larva, bumble bees, honeybees, hummingbird hawk moth. These observations clearly demonstrate a wide variety of fauna is present in the parish which should be carefully protected.

Celandine flower amidst leaf litter and the leaves of Lords and Ladies, provide a later source of food



Ladybirds on broom (left) and knapweed seed head (centre), Bumble bee on Celandine, The Green, Old Knebworth



Six-spot burnet moth (left) and bumble bee on Knautia macedonica (right)

Church Yards for Wildlife

The churchyard of St Martin's provides a safe haven for species that are not found in the wider countryside. The example of Manchester's Southern Cemetery (BBC, 2010) demonstrates this. St Martin's churchyard also contains conifers which provide a source of seeds.



St Martin's church – churchyard

Examples of SuDS and Water Conservation

The photograph below shows an example of how small areas of flowers (left) both look attractive and also provide food and shelter for wildlife. The green roof (right) also helps insulate the building below.



Flowers in Deards End Land and example of green roof, both providing food for wildlife

Surplus or waste material from construction can be used to create SuDS features or wildlife habitats. These can both look attractive and also reduce the total amount of waste going to landfill. The photographs below show old shipping container reused as an information centre. It has a green roof and water is filtered into the adjacent rain garden. In the centre, a bug hotel has been created from many different materials, each creating a multitude of habitats. On the right a border has been created using left over tiles.

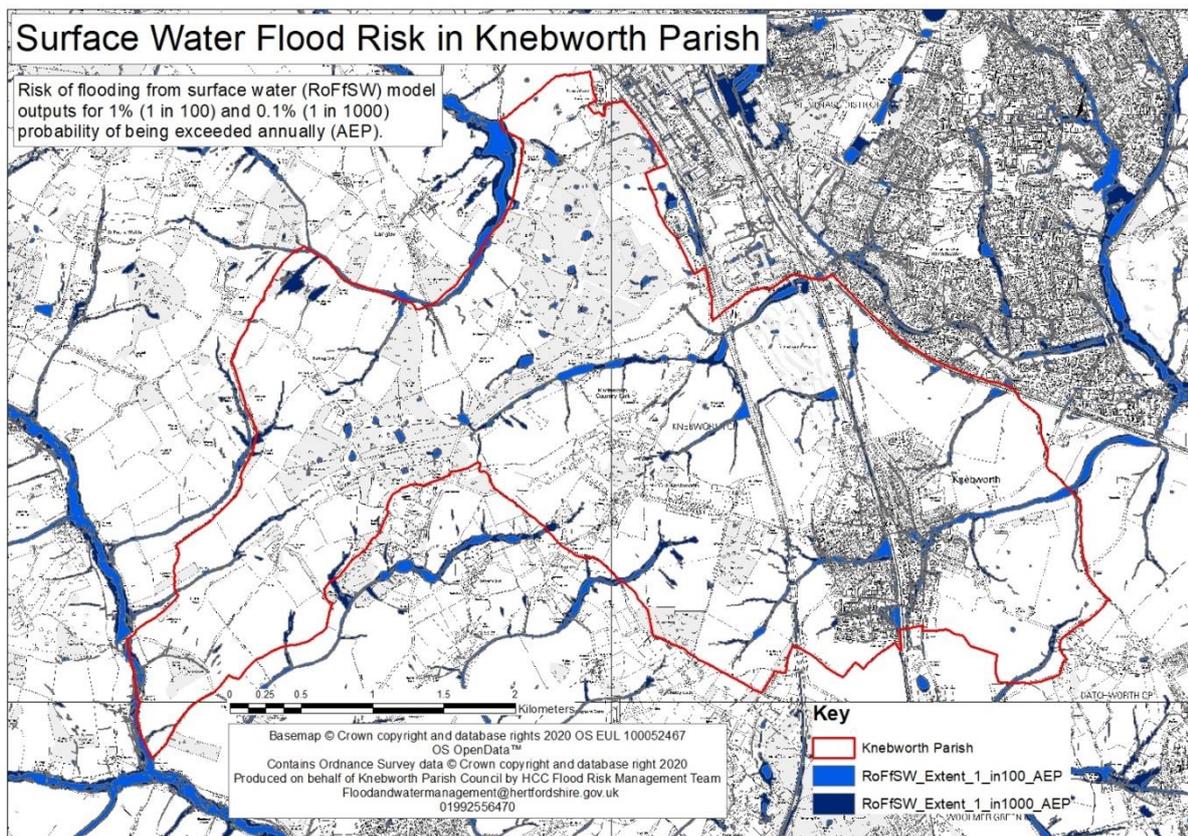
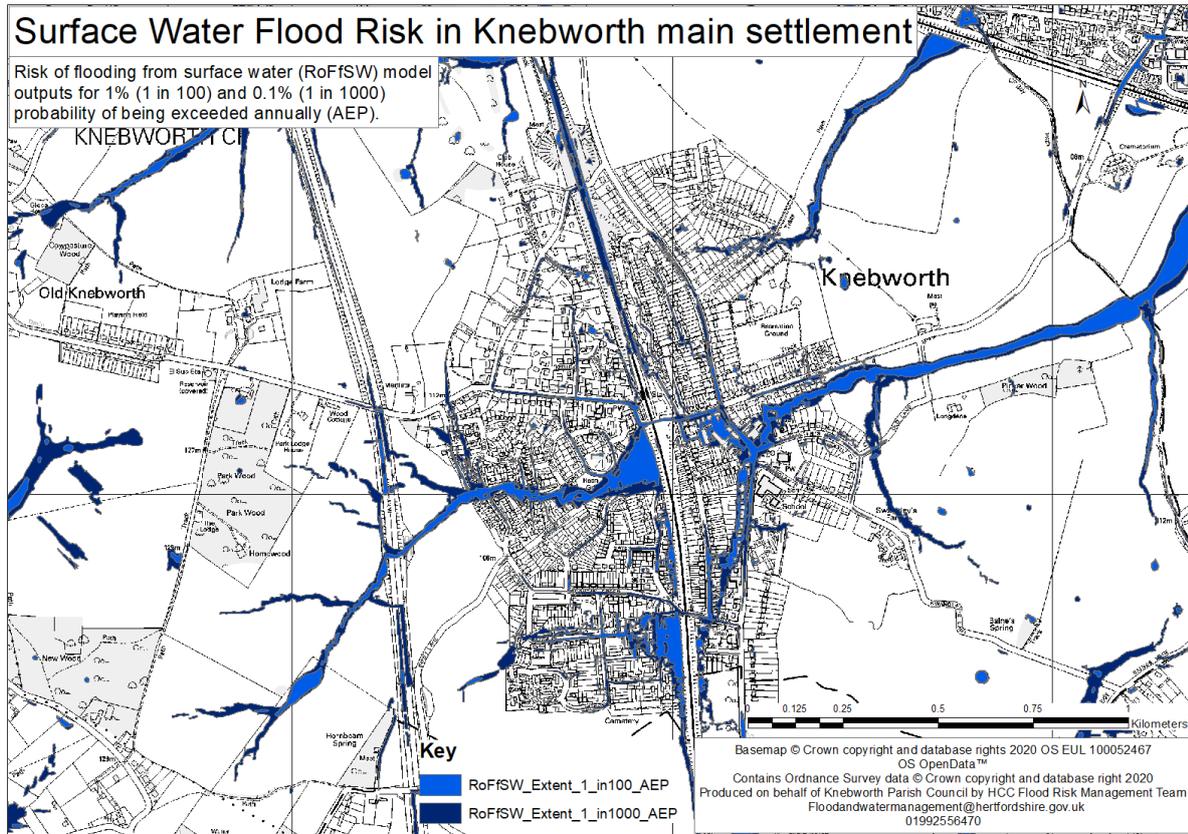


Examples of reuse of materials (London Wetlands Centre)

An example of a significant retrofitted SuDS solution is Lamb Drove in Cambourne, Cambridgeshire (Interpave, 2019). It has been effective and popular with residents. In the retrofitting, the natural water flows were optimised and integrated with the landscape design. This added both amenity interest and biodiversity. It also demonstrated lower construction and whole-life costs.

Water may be conserved in many ways. Rainwater can be harvested and stored for use in the garden, by water butts or underground tanks. Using decorative mulches will also help prevent evaporation by up to 75% as well as providing nooks and crannies for small creatures. Ensuring the soil has a good, aerated structure by incorporating organic matter will allow water to drain more easily, while at the same time allowing plants to find the water and nutrients they need. Generally, most plants, including lawns, should not need to be watered once they are established. The success of this approach can be seen in Beth Chatto's dry garden in Essex.

Appendix J Surface Water Flood Risk Maps



Appendix K AECOM Design Guidelines

Knebworth

3. Design Guidance

This section outlines key design elements and principles to consider when assessing a design proposal.

The aim of this Design Guidance is to ensure that future developments consider local character and can enhance local distinctiveness by creating good quality developments, thriving communities and prosperous places to live.

This chapter provides a set of solid principles that can be applied to all new development, whereas the following chapters focus on urban extensions and regeneration sites respectively.



Knebworth Recreation Ground. Credits: Adam Pengelly

3.1 Place Making and Design Principles

This section introduces a set of placemaking principles that will influence the design of the area's streets, homes and open spaces, and the interfaces between them.

22

AECOM

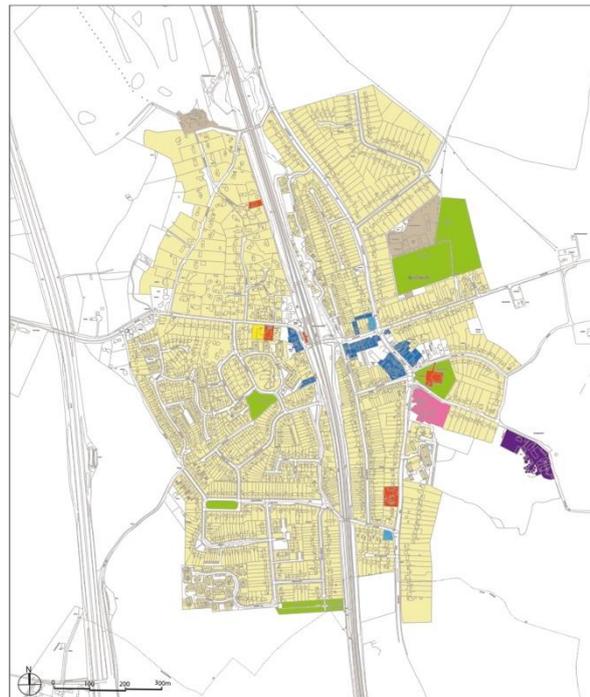
Knebworth

3.1.1 Land Use and Density

Knebworth has developed at a low rise scale, predominantly featuring two storey dwellings. The historic core is predominantly late nineteenth- and early twentieth-century in character, with a higher incidence of terraced and semi-detached buildings. The rest of the village is more recent and has a higher proportion of post-War semi-detached and detached houses. Most commercial spaces are located in the small retail core on Station Road and London Road east of the train station.

In the case of new developments, density should be appropriate to the location and simultaneously respond to the character of the existing settlement areas. Where appropriate, proposals should include a diverse range of densities, building types and forms. Higher density development should be located around key movement nodes or areas that are highly accessible by public transport, walking or cycling. A varied density and land use distribution profile in case of large development sites (which is in the case for sites KB1, 2, and 4) adds interest and supports local facilities, public transport, and supports the legibility of the various character areas.

- Key**
- Residential
 - Primary School
 - Retail
 - Community Centre
 - Health Facility
 - Leisure
 - Religious Building
 - Agriculture Building
 - Open Space



Village-wide land use map

AECOM

23

3.1.2 Place Making

Placemaking is about creating the physical conditions that residents and users find attractive and safe, with good levels of social encounter and layouts that are easily understood. The placemaking principles set out in the following pages should be used to assess the design quality of future development or regeneration proposals.



Walkable Places

Creating new walking routes which are well connected to the existing walking and cycling routes should be present for any new development. Walking routes should be laid out in a way that they follow the shortest and straightest distance between two points.

The success of a place can be measured by its walkability. Therefore, walking distances should be between 5 to 10 minutes to achieve an accessible neighbourhood. It is good practice to plan new homes within a 400 metres walking distance to bus stops or local green spaces and about 800 metres distance from local shops, schools or parks. Pedestrian footpaths should be at least 2 metres wide and be well lit to encourage use at all times.



Footpath between Gipsy Lane and Orchard Way

Connectivity

It is important that all newly developed areas provide direct and attractive footpaths between neighbouring streets and local facilities. Establishing a robust pedestrian network a) across any new development and b) among new and existing development is key in achieving good levels of permeability among any part of Knebworth.

A connected street network provides people with a choice of different routes and allows traffic to be dispersed more evenly across an area rather than concentrated on to heavily trafficked roads.

Design features such as barriers to vehicle movement, gates to new developments or footpaths between high fences should be kept at minimum and the latter should be avoided.

Enclosure

Enclosure is the relationship between public spaces and the buildings or other features that surround them. A more cohesive and attractive urban form is achieved where enclosure is in proportion. The following principles serve as general guidelines that should be considered to achieve a satisfactory sense of enclosure:

- Façades should have an appropriate ratio between the width of the street and the building height.
- Buildings should be designed to turn corners and terminate views.

- Narrow gaps between buildings should be avoided, they should be either detached or properly linked.
- Generally, building façades should front onto streets. Variation to the building line can be introduced to create an informal village character.
- In case of terraced buildings, it is recommended that a variety of plot widths, land use and facade depth should be considered during the design process to create attractive townscape.



Landmarks and Vistas

Places should be planned to respond to existing view corridors or reinforce views of existing landmarks. Careful consideration should be given to the location of any new landmarks as they contribute to the wider legibility of that particular area.

In addition to adapting to local heritage, landmark buildings should also be innovative and interesting. They should promote good architecture and ensure that places are distinct, recognisable and memorable.

Hierarchy of Movements

The network of streets should be designed to enable direct and convenient walking and cycling routes to public transport stops and to village and local centres. Streets should be considered as spaces for use by all, not just by vehicular movements.

The street network must provide a safe and pleasant to use environment at all times of the day. It is important that in the case of new developments, streets should consider the needs of users in

the following order: pedestrians, cyclists, public transport users, and other motor traffic.

A street network with a distinguishable movement hierarchy should be established. Streets should be differentiated based on their character, role and function. Streets can be identified based on their proportion to the scale of development as primary, secondary or tertiary (and cul-de-sacs).



Example of vehicle pinch point with planters on Watton Road.

Example of vertical traffic calming on Watton Road.

Way Finding and Legibility

Developers should aim to create places that have identity and that are easy to navigate through. As noted above, local landmark buildings and clear, direct routes can aid legibility.

Signage could be placed at key nodes and arrival points to aid orientation. The signs should be readable with bare eyes and easy to understand.

Cycle Paths

Cycling routes should be safe and direct and should be form part of a well connected network within Knebworth.

Where dedicated cycle paths are required, these should remain separated from other traffic and pedestrians. However, these cycle paths should always be well over-looked and at the same street level as other routes where possible.



Good example of dedicated cycle path

3.1.3 Urban Structure

Urban structure comprises the pattern or arrangement of urban blocks, streets, buildings, public realm and landscape. The size and organisation of any block varies depending upon diverse parameters such as location, desired land use and density. At an urban scale it is important to achieve a good mix of block form and block size, to facilitate adaptability over the years and ensure a good variety of uses within the new parts of the development.

New development should respond to the existing pattern of development within Knebworth, influenced by existing block sizes and structures, patterns of plot subdivision and the relationship between the built and the non-built private space.

Activity and Frontage

Successful spaces and streets are created where activity and movement occurs. These areas should be designed in a way that they are accessible not only to people living in the community but also to people passing by. In order to achieve this a good mix of land use and provision of well designed public realm is key.

Frontages should be 'active' wherever possible. In residential areas, this means front doors and windows of habitable rooms. In centres, this usually means shopfronts, although uses will not necessarily be retail - food and drink, community uses and services can also provide activity and strong frontages. Shopfront proportions should harmonise with the main building and its neighbouring buildings.

A coordinated, uncluttered approach which is visually cohesive should be a leading design principle in case of new shopfront design.

Ground floor units should be flexible and adaptable to respond to future changing needs of its customers which can reduce the likelihood of vacant units.



Building Lines

The way buildings sit in relation to the street can have a significant consequence on the success of a development. The main façades and entrances of buildings should usually face the street, which additionally allows for natural surveillance and enhances interface activity.

The building line should have subtle variations in the form of recesses and protrusions but should generally form a unified whole.



3.1.4 Parking and Servicing

At the time of writing, the demand for private cars remains high, therefore they have to be carefully integrated into neighbourhoods. There is no single best approach to domestic car parking - a good mix of parking typologies should be deployed, depending on and influenced by location, topography and market demand.

Generally, arrangements for car parking should be safe and convenient and should not undermine the quality and amenity of our streets. Where possible, the predominant parking mode should be on plot, to the side or front. In some cases, when adjoining to existing development, on street parking could be considered as a last resort. However, in this case it should be designed to minimise the visual impact of the car and hard surfaced areas, and its placement should not impede bi-directional traffic flow.

On Plot Parking

On plot parking can be either in garages and/ or on the driveway at the front or the side of the building. As a form of parking it can be visually attractive when it is combined with high quality and well designed soft landscaping. Boundary treatment is the key element in getting aesthetic results which can be achieved by using elements such as hedges, trees, flower beds, low walls, high quality paving materials between the private and public space. Hard standing and driveways should be constructed from porous materials to minimise surface water run-off. Front yards should be of sufficient depth to accommodate the full length of a modern family car if front yard parking is required.



Garages

Garages should be designed either as free standing structures or as additive form to the main building. In both situations, it should be aimed to reflect the architectural style of the main building, looking an integral part of it rather than a mismatched unit.

Often, garages can be used as a design element to create a link between buildings, ensuring continuity of the building line. However, it should be considered that garages are not prominent elements so that, they should be designed accordingly. They should be sufficiently large for modern vehicle parking.

It should be noted that many garages are not used for storing vehicles, and so may not be the best use of space.



On Street Parking

On street parking should be arranged and clearly identified to avoid any undesired situation of street parking.

Parking in such situation can be arranged either:

- Perpendicular; or
- Parallel to the carriageway;

On-street parking should be designed to avoid overly impeding traffic flow, and can serve a useful informal traffic calming function. Potential negative impacts on the street scene can be ameliorated by the use of recessed parking bays with planting between.



Cycle Parking

Cycling can be encouraged by providing secured covered cycle parking within all new residential developments and publicly available cycle parking at destinations.

For residential units with no garage on plot, covered and secured cycle parking should be provided within the domestic curtilage.



Servicing

With modern requirements for waste separation and recycling, the number of household bins quantum and size have increased. The issue poses a problem in regarding the aesthetics of the property if bins are left without a design solution. The images below illustrate design solutions for servicing units within the plot.



3.1.5 Building Forms and Materials

Building form, proportions, roofscape, and overall appearance should be considerate toward the local character of Knebworth, and any new addition should positively contribute to this character. Nevertheless, responding to character of the place should not result in pastiche replicas, instead the emphasis should be placed on contemporary interpretation of traditional building forms to suit current needs.

Building Scale and Massing

Buildings should be sympathetic in scale to the context and should not pass 2-2.5 storeys in residential areas.

Subtle variation in height is encouraged to add visual interest, such as altering eaves and ridge heights. Another way of doing it could be by variation of frontage widths and plan forms. This can be appropriate in both central and more suburban locations.

Building Detailing

Building detailing refers to a set of architectural tools that can contribute to local distinctiveness.

In case of new development, buildings should be designed in harmony and proportional to each other and enhancing or complementing the overall street character.

All building elevations (all floors) should be designed with equal care and design details to create a well integrated overall composition.



Buildings at Corners

Streets should have strong continuity of frontage not only for being visually attractive and enhancing streetscape, but also for providing high levels of natural surveillance.

Corner buildings should have both side façades animated with doors and/or windows. Exposed, blank gable end buildings with no windows fronting the public realm should be avoided.

Decorative architectural elements also should be considered in treating these building types. It is not necessary for strong corner buildings to be taller than neighbouring buildings.

Privacy

In any new development appropriate privacy measures should be taken into account from early design stage. Issues such as overlooking from streets, private and communal gardens, courtyards and open spaces into private property, predominantly for residential units should be all considered. Setback from the street, front garden landscaping and added detailed architectural design should help in balancing privacy to front living spaces with the need for overlooking of the streets.

It is important to clearly distinguish between private and public space. Clear ownership boundaries should be established so that spaces feel safe and are appropriate for the right user group to use.

Setting private-public boundaries:

- Landscape barriers using hedging, boundary fences, small walls or setbacks,
- Minimum front gardens should be 1.5 metres deep unless designed to accommodate parking, in which case they should be minimum 5m deep to avoid highway overhangs.



Roof Line

Creating a good variety in the roof line is a significant element of designing attractive places. There are certain elements that serve as guideline in achieving a good variety of roofs:

- Scale of the roof should always be in proportion with the dimensions of the building itself;
- Monotonous building elevations should be avoided, therefore subtle changes in roof line should be ensured during the design process;
- The design of roof lines should include PV panels or the opportunities to integrate PV panels at a later date;
- Local traditional roof detailing elements should be considered and implemented where possible in case of new development; and
- Dormers can be used as design element to add variety and interest to roofs, however taking the need for PV panels into account.

Materials and Architectural Details

It is important that the materials used in new developments are of a high quality and reinforce the local distinctiveness of Knebworth.

Development proposals should demonstrate that the palette of materials has been selected based on an understanding of the surrounding built environment.

It should be noted that these materials are not prescriptive and there is opportunity for innovative and creative material suggestions in new buildings, restorations and extensions that may complement what already exists. However, when buildings are designed, local heritage of building materials should be taken into consideration.

Materials proposed for use in new development and building extensions shall match or be guided by those used in the existing building or area and subtle variations by street. (Images on page 35 show typical palettes of traditional bricks, rendering, windows, doors, paving and corning).

Architectural detailing should typically display elements that equate to those on existing traditional buildings which provide interest, scale and texture to form and elevations.



BLACK TIMBER CLADDING



CLAY TILE SHINGLES



DECORATED ROOF GABLE



FRONT HEDGES



VARIATIONS IN FACADE MATERIAL AND TEXTURE



RED BRICKS



M GABLES



RED BRICK WINDOW TRIM



CENTRAL GREEN SPACE



CLAY ROOF SHINGLES



HALF-TIMBERED UPPER FLOOR



MULTI-PANELED HORIZONTAL WINDOW



WOODEN PORCH



FRONT GARDEN



BAY WINDOWS

Appendix L Bibliography

Bibliography

- (n.d.). Retrieved from Nomisweb.co.uk:
<https://www.nomisweb.co.uk/reports/localarea?compare=E04004698>
- Acoustical Society Foundarion. (n.d.). *Highway Noise*. Retrieved August 2019, from acousticstoday.org: <https://acousticstoday.org/wp-content/uploads/2016/12/Highway-Noise.pdf>
- Action Oak. (n.d.). Retrieved July 2019, from actionoak.org: <http://www.actionoak.org/>
- AECOM. (Feb 2019). *Knebworth Neighbourhood Masterplanning and Design Guidelines*.
- Air quality.org. (n.d.). *Air Pollution - Air quality and lichens*. Retrieved July 2019, from air-quality.org.uk: <http://www.air-quality.org.uk/19.php>
- Badgerland. (n.d.). *Territories*. Retrieved August 2019, from badgerland.co.uk:
<http://www.badgerland.co.uk/animals/family/territories.html>
- BBC. (2010, October 18). *Science Environment*. Retrieved from bbc.co.uk:
<https://www.bbc.co.uk/news/science-environment-11546089>
- Best4hedging. (n.d.). *Hedge vs fence*. Retrieved August 2019, from best4hedging.co.uk:
<https://www.best4hedging.co.uk/hedge-vs-fence-i56>
- Birbeck, D. a., & Kruczkowski, S. (2015). *Building for Life 12 (third edition)*. Retrieved from designcouncil.org: <https://www.designcouncil.org.uk/resources/guide/building-life-12-third-edition>
- BRE. (2015, November). *Homes and Ageing in England*. Retrieved from bre.co.uk:
https://www.bre.co.uk/filelibrary/Briefing%20papers/86749-BRE_briefing-paper-PHE-England-A4-v3.pdf
- British Society of Soil Science. (n.d.). *How soils support life on our precious planet*. Retrieved August 2019, from soils.org.uk: <https://www.soils.org.uk/how-soils-support-life-our-precious-planet>
- CAG Consultants. (2016, September). *Draft Sustainability Appraisal of North Hertfordshire Proposed Submission Local Plan*. Retrieved from <https://www.north-herts.gov.uk/sites/northherts-cms/files/Sustainability%20Appraisal%20of%20the%20Proposed%20Submission%20Local%20Plan.pdf>
- Centre for Sustainable Energy (CSE). (2020, January 08). *Why we need to climate proof neighbourhood plans*. Retrieved from theplanner.co.uk:
<https://www.theplanner.co.uk/features/micro-climate-why-we-need-to-climate-proof-neighbourhood-plans>
- CIRIA. (2013). *Water Sensitive Urban Design in the UK*. London: CIRIA.
- CLG. (2019, October). *National Planngng Design Guide*. Retrieved from assets.publishing.service.gov.uk:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/843468/National_Design_Guide.pdf

- CLG. (n.d.). *Communities Secretary launches most ambitious heritage preservation campaign for 40 years*. Retrieved December 2019, from gov.uk:
<https://www.gov.uk/government/news/communities-secretary-launches-most-ambitious-heritage-preservation-campaign-for-40-years>
- Committee on Climate Change. (2019, February). *UK housing fit for the future*. Retrieved from theccc.org.uk: <https://www.theccc.org.uk/wp-content/uploads/2019/02/UK-housing-Fit-for-the-future-CCC-2019.pdf>
- Control Solutions INC. (n.d.). *Bringing Nature In: How plants and green spaces benefit your building*. Retrieved August 2019, from controlyourbuilding.com:
<https://controlyourbuilding.com/blog/entry/bringing-nature-in-how-plants-and-green-spaces-benefit-your-building>
- Cranfield University. (2019, August). *A Guide to Better Soil Structure*. Retrieved from landis.org.uk:
https://www.landis.org.uk/downloads/downloads/structure_brochure.pdf
- Dawson, C. (2019, March 06). *Low level letter boxes ban to spare posties backs*. Retrieved from tamebay.com: <https://tamebay.com/2019/03/low-level-letter-boxes-ban-to-spare-posties-backs.html>
- DEFRA. (2009). *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites*. London: Nobel House.
- DEFRA. (2009). *Safeguarding our Soils*. London: Nobel House. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69261/pb13297-soil-strategy-090910.pdf
- DEFRA. (2020). *Biodiversity 2020*. Retrieved from assets.publishing.service.gov.uk:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf
- DEFRA. (2020). *The Biodiversity Metric 2.0*. Retrieved from <http://publications.naturalengland.org.uk/publication/5850908674228224>
- DTP & CLG. (2007). *Manual for Streets*. London: Thomas Telford Publishing.
- Earth Sky. (n.d.). *Want cleaner roadside air? Plant hedges*. Retrieved August 2019, from earthsky.org: <https://earthsky.org/earth/cleaner-road-air-quality-plant-hedges>
- European Network for Rural Development. (n.d.). *Business Models for Business Services Briefing - Working Document*. https://enrd.ec.europa.eu/sites/enrd/files/tg_smart-villages_briefing_business-models.pdf
- Fields in Trust. (2015, October). *Guidance for Outdoor Sport and Play England*. Retrieved from fieldsintrust.org: <http://www.fieldsintrust.org/Upload/file/guidance/Guidance-for-Outdoor-Sport-and-Play-England-Apr18.pdf>
- Garden Gate Magazine. (2012, May 01). *Gardengatemagazine.com*. Retrieved from Step chart: <https://www.gardengatemagazine.com/articles/projects/all/64stepchart/>
- HCC. (2018). *Hearing Timetable and Statements - Week 7 - 26 February-1 March 2018*. Retrieved from north-herts.gov.uk: <https://www.north-herts.gov.uk/planning-policy/local-plan/local-plan-examination/hearing-sessions/hearing-timetable-and-statement-5>

- HCC. (2018, May). *LTP4 Local Transport Plan*. Retrieved from hertfordshire.gov.uk: <https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/ltp4-local-transport-plan-4-complete.pdf>
- HCC. (2018). *Orchard Way/Broom Grove Drainage Investigation Report*. Hertford: HCC.
- HCC. (2019). *Draft Rail Strategy 2019*. Retrieved from hertfordshire.gov.uk: <https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/draft-rail-strategy-2019.pdf>
- Hedgehog Street. (n.d.). *How many hedgehogs are left?* Retrieved July 2019, from hedgehogstreet.org: <https://www.hedgehogstreet.org/about-hedgehogs/how-many-hedgehogs-are-left/>
- Hedgehog Street. (n.d.). *Where do hedgehogs live?* Retrieved August 2019, from hedgehogstreet.org.uk: <https://www.hedgehogstreet.org/about-hedgehogs/where-do-they-live/>
- Hertfordshire Health and Wellbeing Board. (2016). *Hertfordshire Health and Wellbeing Strategy*. Retrieved from hertshealthevidence.org: <https://www.hertshealthevidence.org/documents/key-resources/hertfordshire-health-and-wellbeing-strategy-2016-2020.pdf>
- Herts Flora Group. (n.d.). *Herts Flora Group Newsletter April 2014*. Retrieved July 2019, from hnhs.org: <http://www.hnhs.org/sites/default/files/downloads/newsletters/Flora%20News%2025%202015-04.pdf>
- Hertsmemories. (n.d.). *Hertsmemories.org.uk/content/herts-history/towns-and-villages/knebworth/knebworth-garden-village*. Retrieved from www.hertsmemories.org.uk: <https://www.hertsmemories.org.uk/content/herts-history/towns-and-villages/knebworth/knebworth-garden-village>
- Historic England. (n.d.). <https://historicengland.org.uk/listing/the-list/results/?searchType=NHLE+Simple&search=Knebworth>. Retrieved from Historic England: <https://historicengland.org.uk/>
- IDA. (n.d.). *Light pollution Effects on Wildlife*. Retrieved August 2019, from darksky.org: <https://www.darksky.org/light-pollution/wildlife/>
- Institution of Highways and Transportation. (2000). *Guidelines for Providing Journeys on Foot*. Retrieved from hwa.uk.com: <http://www.hwa.uk.com/site/wp-content/uploads/2017/09/NR.4.3F-CIHT-Guidelines-for-Providing-Journeys-on-Foot-Chapter-3.pdf>
- Interpave. (2019). *Lamb Drove - Demonstrating SUDs with Permeable Paving*. Leicester: BPCF.
- Knebworth Parish Council. (2019). *Knebworth Neighbourhood Plan Consultation Statement*.
- LGA. (2009). *Growing in the Community (Second Edition)*. Retrieved from local.gov.uk: <https://www.local.gov.uk/growing-community-second-edition>
- Madgin, H. (2011). *Knebworth Through Time*. Amberley Publishing.
- MHCLG. (2019, July 21). *Guidance - Natural Environment*. Retrieved from www.gov.uk: <https://www.gov.uk/guidance/natural-environment>

- Ministry of Housing, Communities & Local Government. (Feb 2019). *National Planning Policy Framework*.
- Nation, A. (2019). *Knebworth Wildlife Survey*.
- Network Rail. (2018, February 09). *Strategic Business Plan Summary*. Retrieved from [cdn.networkrail.co.uk: https://cdn.networkrail.co.uk/wp-content/uploads/2018/02/CP6-Strategic-Business-Plan-Comprehensive-Executive-Summary.pdf](https://cdn.networkrail.co.uk/content/uploads/2018/02/CP6-Strategic-Business-Plan-Comprehensive-Executive-Summary.pdf)
- NHDC. (n.d.). Retrieved from herts.gov.uk/sites/northherts-cms/files/Sustainability%20Appraisal%20of%20the%20Proposed%20Submission%20Local%20Plan.pdf
- NHDC. (2008, April 8th). *Register of Buildings of Local Interest*. Retrieved from [north-herts.gov.uk: https://www.north-herts.gov.uk/sites/northherts-cms/files/knebworth_register_of_buildings_of_local_interest.pdf](https://www.north-herts.gov.uk/sites/northherts-cms/files/knebworth_register_of_buildings_of_local_interest.pdf)
- NHDC. (2011). *North Herts Landscape Study*. Retrieved from <https://www.north-herts.gov.uk/sites/northherts-cms/files/CG16%20NHerts%20Landscape%20Study%202011%20-%20Part%201.pdf>
- NHDC. (2016). *North Hertfordshire District Plan Submission Version*. <https://www.north-herts.gov.uk/sites/northherts-cms/files/LP1%20Proposed%20Submission%20Local%20Plan.pdf>.
- NHDC. (2017, October). *North Hertfordshire Transport Strategy*. Retrieved from [north-herts.gov.uk: https://www.north-herts.gov.uk/sites/northherts-cms/files/ED14%20NHDC%20Transport%20Strategy%20October%202017..pdf](https://www.north-herts.gov.uk/sites/northherts-cms/files/ED14%20NHDC%20Transport%20Strategy%20October%202017..pdf)
- NHDC. (2018). *North Hertfordshire Green Belt Review Update 2018*. NHDC.
- NHDC. (n.d.). *Knebworth Conservation Area*. Retrieved July 2019, from [north-herts.gov.uk: https://www.north-herts.gov.uk/home/planning/conservation-and-heritage/conservation-areas/knebworth-conservation-area](https://www.north-herts.gov.uk/home/planning/conservation-and-heritage/conservation-areas/knebworth-conservation-area)
- Research Briefings. (2018). *Starter Homes for First-Time Buyers*. Retrieved from [researchbriefings.parliament.uk: https://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7643](https://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7643)
- RSPB. (n.d.). *Is street lighting bad for wildlife*. Retrieved August 2019, from [rspb.org.uk: https://ww2.rspb.org.uk/birds-and-wildlife/bird-and-wildlife-guides/ask-an-expert/previous/streetlighting.aspx](https://ww2.rspb.org.uk/birds-and-wildlife/bird-and-wildlife-guides/ask-an-expert/previous/streetlighting.aspx)
- Shelter. (2019). *A Vision for Social Housing - Executive Summary*. Retrieved from [england.shelter.org.uk: https://england.shelter.org.uk/support_us/campaigns/a_vision_for_social_housing](https://england.shelter.org.uk/support_us/campaigns/a_vision_for_social_housing)
- State of Nature Partnership. (2019). *State of Nature*.
- The Comet. (2009, September 10th). *Knebworth residents' fury at plans for new secondary school*. Retrieved from [thecomet.net: https://www.thecomet.net/news/knebworth-residents-fury-at-plans-for-new-secondary-school-1-274504](https://www.thecomet.net/news/knebworth-residents-fury-at-plans-for-new-secondary-school-1-274504)
- The Comet. (2011, May 23). *New school plan goes back to chalkboard*. Retrieved from <https://www.thecomet.net/news/education/new-school-plan-goes-back-to-the-chalkboard-1-901359>

- The Lutyens Trust. (n.d.). *Visit to Knebworth*. Retrieved November 2019, from lutyenstrust.org.uk: <http://www.lutyenstrust.org.uk/portfolio-item/visit-to-knebworth-village/>
- The National Heritage List for England*. (n.d.). Retrieved from Historic England: <https://historicengland.org.uk/listing/the-list/results/?searchType=NHLE+Simple&search=Knebworth>
- The Planning Service. (n.d.). *Parking Standards*. <https://www.planningni.gov.uk/downloads/parking-standards.pdf>.
- Transport for New Homes. (2018). *Transport for New Homes: Project Summary Recommendations*. Transport for New Homes.
- Vinent Wildlife Trust. (n.d.). *Polecat*. Retrieved August 2019, from vwt.org.uk: <https://www.vwt.org.uk/species/polecat/>
- Wikipedia. (n.d.). *Knebworth Railway Station*. Retrieved September 2019, from en.wikipedia.org: https://en.wikipedia.org/wiki/Knebworth_railway_station#History
- Woodland Trust. (n.d.). *Bluebell*. Retrieved July 2019, from woodlandtrust.org.uk: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/plants/wild-flowers/bluebell/>
- Woodland Trust. (n.d.). *What is habitat fragmentation*. Retrieved August 2019, from wotlandtrust.org.uk: <https://www.woodlandtrust.org.uk/blog/2018/08/what-is-habitat-fragmentation-and-what-does-it-mean-for-our-wildlife/>
- Woodland Trusts. (n.d.). *Ivy*. Retrieved July 2019, from woodlandtrusts.org.uk: <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/plants/wild-flowers/ivy/>





www.knebworthneighbourhoodplan.org.uk