Guildford borough Infrastructure Delivery Plan

December 2017



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Telephone: 01483 444471

Email: planningpolicy@guildford.gov.uk

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1. Introduction

- 1.1. We have prepared this Infrastructure Delivery Plan (IDP) to support the Guildford borough Submission Local Plan: strategy and sites (December 2017) ("the draft Local Plan"). This IDP provides detail on the infrastructure needed to support the level of development and specific development sites included in the draft Local Plan. The Infrastructure Schedule (also included as Appendix C of the draft Local Plan) provides details of the key infrastructure required to support that plan, who is responsible for delivering it, the cost of provision, and, where currently known, how we expect these costs to be funded1.
- 1.2. The IDP Infrastructure Schedule is a 'living document' that will be reviewed and modified as required throughout the plan period as further information becomes available in order to ensure that it remains up to date.

What is infrastructure?

- 1.3. Creating sustainable communities involves ensuring that the necessary supporting transport, schools, open space, utilities, community, health and leisure infrastructure is provided and available when needed. Infrastructure is the range of services and facilities local communities need to function.
- 1.4. Infrastructure includes services and facilities such as
 - physical assets such as roads, rail stations and sewerage systems
 - social assets such as doctors surgeries, hospitals and schools
 - community assets such as cemeteries libraries and public open spaces.
- 1.5. **Infrastructure** is a broad term that is **formally defined**² for the purposes of the Community Infrastructure Levy (CIL) as including open space, school, health care facilities, flood defences, police infrastructure and other community safety facilities, district heating schemes, and transport improvements. A list of the main types of infrastructure that our IDP and other Local Plan evidence considers is provided below in **Figure 1.1**.

Infrastructure type		Delivery agency	
Physical infrastruct	ure		
Transport	Rail	Network RailSouth Western RailwayFirst Great WesternSouthern Railway	
	Strategic Road Network (SRN) –	Highways England	

¹ Where applicable, the draft Local Plan site policies also include allocations and/or requirements relating to the provision of required infrastructure.

² by Regulation 63 of the <u>Community Infrastructure Levy Regulations 2010 (as amended</u>), based on the definition of infrastructure for CIL purposes in S216 of the 2008 Planning Act.

Infrastructure type		Delivery agency
	This is the network of motorways and trunk roads in England, including the A3 trunk road and the M25 motorway in Guildford borough and beyond, and also the M3 motorway nearby.	
	Local Road Network (LRN) –	Surrey County Council
	Adopted local roads including A principal, B, classified unnumbered and unclassified roads, including footways.	
	Public off-street car parking	 Guildford Borough Council, Surrey County Council and various parish councils Private owners and/or operators of publically available off-street car parks including South Western Railway and First Great Western Railway.
	Bus services, park and ride and coach services	Commercial bus and coach operators Surrey County Council — commission socially necessary bus services, subsidise the Park and Ride bus services and other bus services Guildford Borough Council — operates the park and ride sites and undertaking key project development work working with Surrey County Council.
	Active modes	Surrey Country Council
Utilities	Wastewater treatment	Thames Water
	Water supply	 South East Water Sutton and East Surrey Water Affinity Water (Central Region) – previously Veolia Three Valleys Water Thames Water
	Flood risk reduction	Environment AgencySurrey County CouncilGuildford Borough Council
	Electricity and gas	UK Power Networks (formally EDF) Southern Gas Networks
	Telecommunications	Telecom operators including BT working with Surrey County

Infrastructure type		Delivery agency
		Council on broadband infrastructure
Waste and recycling	Waste collection Waste disposal and treatment	Guildford Borough Council Surrey County Council (waste)
Green	Open space	Guildford Borough Council
infrastructure	Suitable Alternative Natural Greenspace (SANG) via the Thames Basin Heaths Special Protection Area Avoidance Strategy	Guildford Borough Council and private landowners (working with Natural England)

Infrastructure type		Delivery agency
Social and Commu	nity Infrastructure	
Education	Early years education	Surrey County Council (Early Years)Private nurseries
	Primary and secondary schools	 Surrey County Council Academies (including Free Schools) Foundation, voluntary aided and Trust schools Private Education Sector
	Further and higher education	 University of Surrey University of Law Guildford Academy of Contemporary Music Guildford College including Merrist Wood College
Emergency services	Police	Sussex and Surrey PoliceSurrey Police and Crime Commissioner
	Fire and rescue	Surrey Fire and Rescue Service (SFRS)Surrey County Council
	Ambulance	South East Coast Ambulance Service (SECAmb) NHS Foundation Trust
Health and social care	GPs and dental surgeries : Primary health care	 Clinical Commissioning Groups : Guildford and Waverly CCG North West Surrey CCG Surrey Heath CCG Private doctors and dental practices NHS England
	Secondary/acute health care/hospitals and community health care	 Surrey Health and Wellbeing Board Royal Surrey County Hospital National Health Service (NHS) England Private, voluntary and charity providers

Infrastructure type		Delivery agency
	Residential care	Surrey County Council and Guildford Borough Council
Community facilities	Libraries	Surrey County Council Library Service
	Cemeteries and crematoria	Guildford Borough Council, parish councils and private providers
	Community meeting halls	Guildford Borough Council, Parish Councils and other community organisations
	Sports facilities	 Guildford Borough Council, Surrey County Council and private providers, including the University of Surrey

Figure 1.1: Scope of Infrastructure Delivery Plan

Why and how we have prepared this IDP

- 1.6. National planning policy (the <u>National Planning Policy Framework</u> / NPPF) tells us that in preparing our new Local Plan, we should include strategic policies to deliver health, security, community, cultural, transport, telecommunications, waste management, water supply, wastewater, and flood risk infrastructure. Local Plans should plan positively for development and infrastructure required in the area to meet the NPPF's objectives and policies.
- 1.7. As required (NPPF paragraph 162), we have been working with infrastructure providers and other authorities to assess the quality and capacity of existing infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk. This includes standards for provision where relevant and available. Our findings from the quality and capacity assessment have been summarised in <u>Guildford borough Infrastructure Baseline</u>, <u>July 2013</u>.
- 1.8. Furthermore, national planning guidance (the Planning Practice Guidance) advises that in preparing a Local Plan, we should identify what infrastructure is needed to deliver that plan, how it can be funded, and delivered at the appropriate time. Understanding the investment plans and critical dependencies of infrastructure providers is vital to this process.
- 1.9. Some infrastructure, such as delivery of connection to utility infrastructure, and European Habitat mitigation will be an integral part of most new development. Other elements, such as open space and transport contributions will relate to the identified needs that would arise from a development in a particular location. These requirements are informed by infrastructure planning work and the planning application process, with details set out in the Planning Contributions SPD.
- 1.10. Focussing on the first five years of the new Local Plan, for which there is more certainty from infrastructure providers' investment plans, we have established what infrastructure is needed, who is going to fund and provide it, and how it relates to the anticipated rate and phasing of development. For the later stages of the plan period, there is less detail available for some infrastructure types. Where the deliverability of critical infrastructure is uncertain, the Local Plan addresses the consequences of this, including possibly contingency arrangements.
- 1.11. Infrastructure planning is vital to ensuring that the new Local Plan is effective, that is, it can be delivered. The Local Plan will face this, amongst other tests at independent examination. Understanding Local Plan viability is critical to the overall assessment of deliverability. The NPPF requires that the sites and the scale of development identified in a Local Plan should not be subject to obligations and policies that threaten their viability and therefore their delivery.
- 1.12. To ensure that development is viable and so likely to be delivered, the cumulative cost of any policy requirements or standards likely to be applied to development (including affordable housing and infrastructure contributions) should allow developments to provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable (NPPF paragraph 173). The cumulative impact of the standards and policies

should not put the implementation of the Local Plan at serious risk, and should facilitate development throughout the economic cycle. Requirements for affordable housing or local standards that may be applied to development should be assessed at the plan-making stage, where possible.

- 1.13. We are required to set out any policies for seeking planning obligations in our Local Plan in order to enable fair and open testing of the policy at examination. As recommended by national policy, we have set out our affordable housing, transport, SPA-mitigation policy, and other requirements in our draft new Local Plan. The NPPF (paragraph 153) indicates that Supplementary Planning Documents should be used where they can assist infrastructure delivery, but should not be used to add unnecessarily to the financial burdens on development. We will expand on the draft new Local Plan policies and provide further detail in a revision to the existing Guildford Planning Contributions Supplementary Planning Document.
- 1.14. We have undertaken a study, which includes consideration of the impact on development viability of the Guildford Borough Proposed Submission Local Plan policies and standards, including affordable housing requirements and infrastructure costs. Assumptions and findings are set out in the <u>Local Plan and CIL Viability Study (2016)</u>. The outcomes of this study were positive, indicating that the plan would not unduly burden the delivery of residential and non-residential development in Guildford borough. Furthermore, based on the testing undertaken, the study found that a CIL rate for residential floorspace could be accommodated in most parts of the Borough, albeit at different rates.
- 1.15. The Submission Local Plan consulted on in 2017 included several amendments to policies with cost implications and thus potential influences on viability. In this regard, the <u>Local Plan Viability Update (2017)</u> was undertaken which supplements and should be read with the Local Plan and CIL Viability Study (2016). The findings of the update indicate that, in relation to the bulk of future sites likely to come forward within the borough, the Draft Local Plan would not unduly burden the delivery of residential development in Guildford borough.
- 1.16. Where practical CIL charges should be worked up and tested alongside the Local Plan (NPPF paragraph 175). Guidance tells us that there is a strong advantage in preparing the CIL in parallel with production of a new Local Plan, as it allows infrastructure funding and the viability of policies and standards to be considered in a comprehensive and co-ordinated way. This is the approach we have taken with our new Local Plan, where the intention is to introduce the CIL as soon as possible to contribute to enabling the delivery of infrastructure to support development.

Working together: Cross-boundary infrastructure issues

- 1.17. Along with the other districts and boroughs in the county, we worked with Surrey County Council and its consultant AECOM, who produced the <u>Surrey Infrastructure Study</u>.
- 1.18. The Study was prepared on behalf of Surrey County Council and the eleven borough and district councils in Surrey. Each of the boroughs and districts has an existing or emerging local plan that sets out the planned development across its area and the infrastructure needed to

support it in the short to medium term. The study brings these plans together to provide an overview of growth and infrastructure at the strategic level across Surrey and to highlight to government, infrastructure providers, developers, local communities and businesses the scale of investment required. A wide range of stakeholders were engaged to inform the study including county and district council service providers, transport operators, utility companies, higher education providers, Clinical Commissioning Groups, the Environment Agency, Surrey Nature Partnership and the Coast to Capital and Enterprise M3 Local Economic Partnerships.

- 1.19. Many of the key infrastructure services are provided by the private sector within a regulatory framework, overseen on behalf of the Government by independent regulators. The ability of some organisations to take a long-term view on the provision of additional infrastructure is affected by the regulatory framework, which commonly involves reviews for a shorter timeframe than the Local Plan. Where major increases in capacity are required, the costs may need to be spread over more than one cycle of the regulatory framework. The different timescales of the regulatory plans of the various infrastructure providers is highlighted as a challenge to infrastructure planning to support a Local Plan.
- 1.20. There are new strategically important developments either with planning permission or being planned nearby that would potentially impact on Guildford borough. These include:
 - <u>Aldershot urban extension</u>, Rushmoor district see planning permissions granted. This is currently under construction.
 - <u>Princess Royal Barracks, Deepcut</u>, Surrey Heath borough (small area of open space in Guildford borough) – see planning permission granted
 - Dunsfold Aerodrome, Waverley district
- 1.21. We have prepared a separate **Topic Paper** on the **Duty to Co-operate**, which summarises agreements to date and ongoing joint working with our "prescribed bodies" partners. These include the various organisations that the government categorises as "prescribed bodies" for the purposes of Duty to Co-operate.

Funding and delivering infrastructure

- 1.22. In recent decades, pressure on infrastructure within Guildford borough has been increasing for a number of reasons. As well as natural population growth and an overall increase in income, one reason is that historically infrastructure has not been provided or upgraded at an appropriate rate to meet the needs of new development. This is largely due to the pattern of infill development in our urban area and to a lesser extent in village areas. This is reflected in a large number of small (providing less than five homes each) and medium-sized (between six and 15 homes) development sites in the recent past.
- 1.23. These developments are generally too small to require a contribution to be made towards infrastructure provision, being under most of our planning obligations thresholds. Taken together, these represent a significant amount of development requiring supporting infrastructure. Strategic planning and the introduction of the CIL aim to remedy this, as contributions will be required from much smaller developments, and almost all new homes

except for affordable homes will contribute to the borough's infrastructure.

- 1.24. It is generally accepted that new or improved infrastructure to support development should be available when it is first needed. This benefits the occupants of the new development itself, as well as the wider area, which will not face greater infrastructure stress as a result of that development.
- 1.25. Although some key infrastructure projects form part of the investment plans of infrastructure providers, with committed public and private funding sources, much infrastructure, particularly smaller infrastructure projects is not planned and funded at the national or regional level.
- 1.26. It has been accepted practice that developers pay towards mitigating the impact that their development will have on infrastructure in the area³. However, developers are generally not willing to invest money in the infrastructure of an area without some degree of confirmation or certainty that they will be able to build their proposed development. This is usually secured by the developer providing, or contributing to, the infrastructure needed to support their development. This is either part of their planning permission, in the case of use of conditions or obligations, and/or, in future, by payment of the Community Infrastructure Levy (CIL) and potentially through licencing. Using planning conditions, S106 planning obligations and in future, the CIL and licencing, we can regulate the timing of infrastructure delivery relative to the development that it supports.
- 1.27. When dealing with new infrastructure to support a large number of homes, such as on a strategic site, however, for some types of infrastructure, it is not helpful to build it at the start of the development, when only a very small proportion of it would be needed.
- 1.28. For example, with a phased strategic-scale housing development, having a new school built and opened to educate the children who move into the first new homes would result in a school being mostly empty, with low class numbers and lacking a full teaching staff and classes. If the new school is built without sufficient pupils for a full intake, it could potentially destabilise existing schools nearby as some pupils may choose to transfer. When the later phases of the development are built, the new school may be full with pupils who have transferred from the older school, and who live in older housing and have reached school age and prefer the new school. This is one reason why schools need to be built in phases, related to the phasing of the strategic housing development.
- 1.29. To ensure that sites removed from the Green Belt to provide new schools are used for that purpose only, we can specify that ownership of the land needed shall be transferred to the local education authority, Surrey County Council, with a restrictive covenant that it can only be used for education purposes. We are considering examples of how other borough / district councils have secured sites for schools, and are working with SCC and the Education and Skills Funding Agency to consider how best to secure the sites for schools and how the schools would best be delivered.

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³ The draft local plan policies relating to infrastructure are drafted in a manner that seeks to ensure the appropriate delivery of necessary infrastructure upon which the growth proposed in the plan is predicated.

- 1.30. We acknowledge that we currently have some gaps in our information on future infrastructure needs and on securing infrastructure. Many infrastructure providers are re-evaluating their budgets and delivery programmes due to the need to make savings. In addition, many public sector infrastructure providers are facing changes to their funding streams and service delivery arrangements, and consequently have not yet been able to provide us with information. However, this is acceptable, as the IDP is a 'live' document and its Infrastructure Schedule will be regularly reviewed and updated to take into account any future organisational, service delivery and funding changes and their potential impact on the delivery of the new Local Plan.
- 1.31. National guidance tells us we may ask developers to provide contributions for infrastructure in several ways. This may be by way of the Community Infrastructure Levy (CIL), section 106 planning obligations and section 278 highway agreements. Developers will also have to comply with any conditions attached to their planning permission. Local authorities should ensure that the combined total impact of such requests does not threaten the viability of the sites and scale of development identified in the development plan.
- 1.32. Throughout the process of introducing the CIL, we need to work proactively with developers to ensure they are clear about infrastructure needs, and what we will expect them to pay for through which route. There should be not actual or perceived 'double dipping' with developers paying twice for the same item of infrastructure.
- 1.33. In considering and determining planning applications and appeals we, and the Planning Inspectorate, may use planning conditions and / or planning obligations to make unacceptable development acceptable.
- 1.34. The National Planning Policy Framework "NPPF" (paragraph 203) requires local planning authorities such as Guildford Borough Council to consider whether a development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address the issue through a planning condition.
- 1.35. A planning condition may specify that development may not happen until the required infrastructure is provided or improved. Planning obligations can be used to fund or provide a variety of infrastructure and other "benefits".
- 1.36. Planning obligations that could be subject to CIL (i.e. are "infrastructure") are subject (since April 2010) to three statutory tests (under the CIL Regulations 2010 as amended) in order to be taken into account in determinations. These test are that the planning obligation must be:
 - Necessary
 - Directly related to the development
 - Fairly related in scale and kind to the development
- 1.37. CIL can be used to pool / collect together financial contributions collected from different planning applications, whereas S106 planning obligations are currently subject to a nationally-

imposed limit of no more than five planning obligations (counted since 6 April 2010) for the provision or provision by way of funding being pooled for any one infrastructure project or type. This national pooling restriction is being reconsidered as part of the national review into the workings of the CIL.

- 1.38. We are required to use CIL receipts to fund infrastructure to support development in the area. GBC cannot use CIL to fund projects and items that are not classed as "infrastructure". We should not use CIL to remedy pre-existing deficiencies in infrastructure provision unless those deficiencies would be made worse by the proposed development. So the CIL can be used to increase the capacity of existing infrastructure, or to repair failing existing infrastructure, provided it is necessary to support development. For example, surface water flood mitigation to resolve an existing flooding problem that would be made worse by new development.
- 1.39. National policy (NPPF paragraph 175) states that the CIL should support and incentivise new development, particularly by passing over a meaningful proportion of the funds raised with the neighbourhoods where development takes place. This is set nationally at a minimum of 15 per cent capped at £100 per existing home, or 25 per cent where Parishes / Neighbourhood Forums have an adopted Neighbourhood Plan. In areas of the borough with no Parish Council, we will work with existing local amenity, resident and interest groups to spend their Neighbourhood Portion on their agreed priorities.

2. Transport

- 2.1 We have worked with all the relevant authorities and key transport infrastructure and service providers that commission, fund and operate the transport networks and services in Guildford borough.
- 2.2 This section considers the following transport networks and services:
 - Rail
 - Strategic Road Network
 - Local Road Network
 - Public off-street car parking, available to members of the public for parking
 - Bus services, Park and Ride and coach services
 - Active modes,

Rail

Lead agency	Network RailSouth Western RailwayFirst Great WesternSouthern Railway
Key reports and data	 Wessex Route Study (Network Rail, August 2015) Surrey Rail Strategy: Surrey Rail Strategy Report (Arup, September 2013) Southern Rail Access to Heathrow Feasibility Study (Network Rail, December 2015) Estimates of Station Usage 2016-17 (Office of Rail and Road, December 2017) Guildford Town and Approaches Movement Study: Strategy Report (Arup, March 2015) Consultation draft Better Rail Stations: An Independent Review presented to Lord Adonis, Secretary of State for Transport (Green and Hall, 2009)

Context

- 2.3 The infrastructure of the railways including tracks, signals, tunnels, bridges and stations is owned and, with the exception of the stations, operated by Network Rail.
- 2.4 Passenger rail services are operated by the Train Operating Companies (TOCs) under franchise agreements with the Department for Transport (DfT). All the stations in Guildford borough are managed by either South Western Railway or First Great Western.

Existing provision

2.5 Rail services are a key part of the transport network serving Guildford borough. Of residents in the borough who travel to their place of work, 12.6 per cent travelled by train in 2011 (2011)

Census), compared to 9.5 per cent in 2001. This represents an absolute increase of over 1,900 people per day using the train to get to work across the decade.

- 2.6 There are twelve rail stations in the borough as shown in **Figure 2.1**.
- 2.7 Guildford rail station provides an interchange between rail services on the Portsmouth Direct Line (between Portsmouth and London Waterloo), the New Guildford Line (between Guildford and London Waterloo), the North Downs Line (between Reading and Gatwick Airport) and the Ascot to Guildford Line.
- 2.8 Heathrow airport can be reached on the Woking Railair 701 coach service via Woking rail station. This is operated by National Express Coaches.

Station name	Category (see key below)	Portsmouth Direct Line/ South West Main Line	New Guildford Line	North Downs Line	Ascot to Guildford Line	Alton Line	Mole Valley Line – Bookham branch
		Direct connections to London Waterloo, Clapham Junction, Woking, Haslemere and Portsmouth Harbour	Direct connections to London Waterloo, Vauxhall, Clapham Junction, Wimbledon, Surbiton and Guildford	Direct connections to Reading, Dorking, Reigate, Redhill and Gatwick Airport	Direct connections to Ascot, Camberley and Guildford	Direct connections to Wanborough, Ash, Aldershot and Alton	
Guildford	В	✓	✓	✓	✓		✓
London Road (Guildford)	D		✓				✓
Clandon	Е		✓				\checkmark
Horsley	D						✓
Effingham Junction	D		✓				✓
Shalford	F			✓			
Chilworth	F			\checkmark			
Gomshall	F			\checkmark			
Wanborough	F			\checkmark	✓		
Ash	Е			\checkmark	✓		
North Camp	Е			✓			
Ash Vale	D				\checkmark	\checkmark	

Figure 2.1: Rail stations and lines in Guildford borough Note: Categories of station are as follows: (based on Green and Hall, 2009):

Category	Type of station	Category	Type of station
Α	National hub	D	Medium staffed
В	Regional	E	Small staff
	interchange		
С	Important feeder	F	Small unstaffed

Demand and impacts

35

2.9 There were over 11 million estimated entries and exits made at the twelve stations in 2016/17, including 8.2 million at Guildford rail station (Estimates of Station Usage 2016-17 (Office of Rail and Road, December 2017) shown in **Figure 2.2**.

Station name	Passenger entries and exits	Interchanges
	2016/2017	
Guildford	8,192,104	1,105,291
London Road Guildford)	568,778	-
Clandon	222,750	-
Horsley	448,708	-
Effingham Junction	317,090	16,287
Shalford	139,414	-
Chilworth	27,252	-
Gomshall	58,228	-
Wanborough	106,690	-
Ash	279,244	33,873
North Camp	394,970	-
Ash Vale	480,854	122,402
TOTAL	11,236,082	1,277,854

Figure 2.2: Passenger usage of rail stations in Guildford borough

- 2.10 There are key capacity and adequacy issues for rail in Surrey (Arup, September 2013), several of which relate specifically to Guildford borough.
 - Capacity to London Waterloo trains between Portsmouth and Haslemere and London Waterloo serve the main Guildford train station. On these services, trains use part of the South West Main Line, the capacity of which will be a major long-term challenge as demand already exceeds the seats available during the busiest times on weekday services.

- The North Downs Line there is existing overcrowding on peak services between Guildford and Reading.
- Access to main centres in the county existing train services are often infrequent and offer poor connections, for example Alton to Guildford.
- Links between new developments and stations to support sustainable travel choices, and developing appropriate solutions.
- Access to international gateways particularly Heathrow and Gatwick airports, but also High Speed 1 and 2, to maintain Surrey's global competitiveness.

Planned Provision

- 2.11 The Government and Network Rail are responsible for planning the future improvement of the national rail network. We are working closely with them, and with other partners including Surrey County Council, the Local Enterprise Partnership, South Western Railway and Great Western Railway, and previously with the former franchise operator South West Trains, to bring forward an ambitious programme of rail enhancements in our borough and complementary improvements in the wider region. These will be key to the redevelopment of brownfield sites in Guildford town centre, new urban extensions planned both west and east of Guildford and a new village community in Wisley.
- 2.12 Network Rail's Wessex Route Study (August 2015) proposes a strategy, including "choices for funders" for the Department for Transport to consider, which addresses the challenge of accommodating projections for growth to 2043.
- 2.13 Options are set out, including the Crossrail 2 scheme, which in combination would remove the capacity constraint on the South West Main Line between Surbiton and Waterloo and allow for an additional 13 trains per hour peak services forecast to be required by 2043. The Government and Transport for London have subsequently announced funding for the Crossrail 2 scheme, which is expected to be operational in 2033. Schemes to provide grade separation at Woking Junction and an additional through platform at Woking station will also be required.
- 2.14 The study also proposes a 'Guildford platform capacity' scheme to provide additional platforms and layout changes at Guildford station. Network Rail consider that this scheme is required from Control Period 7 (2024-2029) to facilitate planned future uplifts in service frequencies on the Portsmouth Direct Line and the North Downs Line. However, it is suggested that it could be an option for Control Period 6 (2019-2024), and we support this earlier delivery.
- 2.15 Accordingly, the Wessex Route Study (Network Rail, August 2015), supplemented by discussions with Network Rail, is the primary reference source for the following schemes included in the Infrastructure Schedule:
 - NR1 'Guildford rail station capacity and interchange improvements'
 - NR4 'Electrification of North Downs Line, facilitating increased service frequency'
 - NR5 'Portsmouth Direct Line improvements (together with South West Main Line Peak Demand improvements'.

2.16 In agreement with Network Rail, we have made a site allocation as Policy A8 'Land west of Guildford railway station, Guildford Park Road, Guildford' in the Submission Local Plan, as follows:

"This site is allocated for a 'Guildford platform capacity' scheme involving additional platforms and layout changes at Guildford railway station as proposed in the Wessex Route Study"

- 2.17 Scheme NR6 ('North Downs Line (Great Western Railway) service frequency and timetable improvements') has been identified based on discussions with Great Western Railway and Network Rail.
- 2.18 The case for the new rail stations at Guildford West (Park Barn) and Guildford East (Merrow), schemes referenced as NR2 and NR3 respectively in the Infrastructure Schedule, was made in both the Surrey Rail Strategy: Surrey Rail Strategy Report (Surrey County Council, September 2013) and the Guildford Town and Approaches Movement Study: Strategy Report (Arup, March 2015). Guildford Borough Council's Major Projects Team is progressing the development of the proposal for this new railway station, following Network Rail's Governance for Railway Investment Projects (GRIP) process. Martin Grant Homes, promoter of Gosden Hill Farm site, has undertaken development work to progress the proposal for this new railway station, also following the GRIP process.
- 2.19 Network Rail considers that, subject to further assessment and approval, the delivery of a new station at Guildford East (Merrow) is feasible and viable. South Western Railway, which was recently awarded the South Western franchise for a period of seven years from August 2017, has publically committed to work with stakeholders to progress the plans for new stations at Guildford West (Park Barn) and Guildford East (Merrow).
- 2.20 We have made a site allocation for the new rail station at Guildford West (Park Barn). This is Policy A59 'New rail station at Guildford West (Park Barn)' in the Submission Local Plan. The new rail station is to be located adjacent to the Royal Surrey County Hospital.

Summary

- 2.21 There are quality (or adequacy) and capacity issues with the present rail infrastructure.
- 2.22 A significant programme of rail schemes is set out in the Infrastructure Schedule which includes schemes planned to address capacity issues on the Portsmouth Direct Line (NR5) and the North Downs Line (NR4) and at Guildford rail station (NR1).
- 2.23 New stations at Guildford West (Park Barn) and Guildford East (Merrow), which are schemes referenced NR2 and NR3 respectively, are also proposed. These will serve new and existing communities, and in the case of the Guildford West rail station, also serve an economically active area of Guildford which includes the Royal Surrey County Hospital, the University of Surrey's Manor Park campus including the Surrey Sports Park, and the Surrey Research Park.

Strategic Road Network

- amended (Defra, January 2014) and Map tiles 128 and 144
- Strategic Highway Assessment for the Guildford borough Proposed Submission: strategy and sites – (Surrey County Council, June 2016)
- Addendum to Guildford Borough Proposed Submission Local Plan "June 2016" Strategic Highway Assessment Report: High level review of potential traffic impacts of key changes in the Guildford borough Proposed Submission Local Plan: strategy and sites "June 2017" (Guildford Borough Council, June 2017)
- Study of performance of A3 trunk road interchanges in Guildford urban area to 2024 under development scenarios (Mott MacDonald, December 2017)
- Guildford Borough Transport Strategy 2017 (Guildford Borough Council, December 2017)
- Topic Paper: Transport (Guildford Borough Council, December 2017)

Context

- 2.24 Highways England is a Government-owned Strategic Highways Company which has been appointed by the Secretary of State for Transport as the Highway Authority responsible for operating, managing and improving the nationwide Strategic Road Network (SRN) of motorways and major A roads, including for the A3 trunk road and M25 motorway within Guildford borough.
- 2.25 The Highways England: Licence (Department for Transport, April 2015) states that "The network for which the Licence holder is responsible is a critical national asset, which the Licence holder must operate and manage in the public interest, in respect of both current activities and needs and in providing effective stewardship of its long-term operation and integrity."
- 2.26 In addition, it requires that 'the Licence holder must, in exercising its functions and complying with its legal duties and other obligations, act in a manner which it considers best calculated to:
 - a. Ensure the effective operation of the network;
 - b. Ensure the maintenance, resilience, renewal, and replacement of the network;
 - c. Ensure the improvement, enhancement and long-term development of the network;
 - d. Ensure efficiency and value for money;
 - e. Protect and improve the safety of the network;
 - f. Cooperate with other persons or organisations for the purposes of coordinating day-to-day operations and long-term planning;
 - g. Minimise the environmental impacts of operating, maintaining and improving its network and seek to protect and enhance the quality of the surrounding environment:
 - h. Conform to the principles of sustainable development."

Existing provision

- 2.27 There are two SRN routes which pass through Guildford borough:
 - the M25 motorway, which enters the borough at the Wisley interchange (M25 junction 10 with the A3), and
 - the A3 trunk road that connects London to Portsmouth, which runs through the borough from north-east to south-west, with a number of junctions which allow traffic to join or leave the A3.
- 2.28 The M3 motorway, which is also an SRN road to the north of our borough, is accessed via the A331 Blackwater Valley road from Ash.
- 2.29 The direct connections to the SRN provide links to Greater London, Heathrow and Gatwick airports, ports and other key destinations. Heathrow and Gatwick airports and areas of south and west London are accessible by road within an hour.
- 2.30 The remainder of this section considers the A3, being the key SRN in the borough.
- 2.31 From the south-west of the borough to its junction with the A31 Hog's Back, the A3 trunk road is a dual carriageway with two lanes on each carriageway. The speed limit is 70 miles per hour (mph). A dual carriageway is a class of highway with two carriageways for traffic travelling in each direction, separated by a central reservation.
- 2.32 For four kilometres between its junctions with the A31 Hog's Back and the A320 Stoke interchange, the A3 bisects the urban area of Guildford. The road here continues as a dual carriageway with two lanes in each direction. The road is of a lower standard in this section, with a gradient of as much as 4.5 per cent and tight bends with limited forward visibility, and so has a lower 50mph speed limit.
- 2.33 From the A320 Stoke interchange to the M25 Wisley interchange, the A3 is dual carriageway with three lanes each way. The speed limit is 70mph.
- 2.34 The staggered junction at the University interchange in Guildford and the M25 Wisley interchange allow movements by vehicles in all directions. All of the other A3 junctions in our area allow only limited access by vehicles to and from the Local Road Network (LRN) and those in the town are closely spaced.
- 2.35 Some properties and minor roads have direct access on and off the A3. For instance, Beechcroft Drive, which is located south of the Manor Park campus of the University of Surrey, is a private no through road serving a number of homes and a farm.

Demand and impacts

2.36 Significant, recurrent traffic congestion is experienced during peak hours on the A3 trunk road through the urban area of Guildford, with queuing extending back onto the dual carriageway section of the eastbound A31, and to the east between the A247 Burnt Common interchange (the junction for Ripley) and the A3/M25 (Junction 10) Wisley interchange. See Highways

England (March 2017).

- 2.37 Sections (between the interchanges) of the four kilometre stretch of the A3 between the A3/A31 Hog's Back and the A320 Stoke interchange, operate significantly in excess of their theoretical capacity during the morning and evening peak periods.
- 2.38 Together with the sequence of closely spaced, limited access interchanges, there is a strong relationship between traffic conditions on the A3 and those on the LRN in Guildford. This results in traffic having to travel through Guildford town centre when it does not need to. The result is that traffic congestion in Guildford can adversely affect conditions on the A3 and vice versa.
- 2.39 The A3 around Guildford also experiences a high accident rate including many minor accidents associated with peak time traffic merging at junctions, off peak accidents associated with speeding and the junctions, vehicles leaving the carriageway, skidding or overturning, accidents at night and accidents involving parked vehicles. The section of the A3 between the A31 and the A322 interchanges has the highest collision rate per km for all collision severities of any part of Highways England's M25 to Solent (A3 and M3) route (Highways England, April 2015). The area around the M25 junction 10/A3 Wisley interchange has the highest recorded collision rate across the Highways England network (Highways England, December 2016).
- 2.40 There is a lack of technology to guide drivers on the A3 which affects the ability of the route to cope with incidents when accidents occur however minor. The A3 is also not on the core routes patrolled by the Highways England Traffic Officer Service (Highways England, March 2017). Some operational resilience is provided by virtue of the A3 and M3 connecting via the A31/A331 from Guildford to Blackwater Valley, however this can lead to issues occurring on local roads as a result (Highways England, March 2017).
- 2.41 Long sections of the A3 in the Guildford urban area and two discrete locations in the wider borough by junctions the B3000 interchange near Hurtmore and the A247 Burnt Common interchange (the junction for Ripley) are designated as First Priority Locations for noise action planning through the Noise Action Plan: Roads (including Major Roads Environmental Noise (England) Regulations 2006, as amended (Department for Environment, Food and Rural Affairs (Defra), 2014). Other sections of the A3 as identified as Important Areas for noise action planning. The M25 to Solent Route Strategy (Highways England, March 2017) identifies that noise is an issue 'notably along the A3 at Guildford'.
- 2.42 The present configuration of the A3 trunk road in the Guildford urban area causes significant community severance. Community severance has been defined as the separation of people from facilities, services and social networks they wish to use within their community; changes in comfort and attractiveness of areas; and/or people changing travel patterns due to the physical, traffic flow and/or psychological barriers created by transport corridors and their use (Quigley and Thornley, 2011).
- 2.43 The A3 trunk road, as well as to a lesser extent the railway lines and the River Wey, sever the Guildford urban area and have few crossing points. Guildford town centre, Guildford and London Road rail stations, the main University of Surrey campus and some neighbourhoods

are south and east of the A3, whilst the Royal Surrey County Hospital, the Surrey Research Park, the Surrey Sports Park, industrial estates and other neighbourhoods are to the north and west. Highways England recognise that this affects walking and cycling in Guildford (Highways England, March 2017).

2.44 The M25 to Solent Route Strategy (Highways England, March 2017) recognises that "The evidence base identifies a large number of current and proposed development opportunities" in the area served by its M25 to Solent routes, and specifically that "Growth in and around Guildford also relies on the A3 which plays a vital role in connecting its urban centre and provides a network for strategic journeys to other regional economic hubs."

Planned provision

- 2.45 Long term strategic planning and funding of the SRN has been introduced by the Infrastructure Act 2015 through the periodic preparation of Route Strategies and the publication of the Government's Road Investment Strategy (RIS).
- 2.46 The Department for Transport's first RIS for the 2015/16-2019/20 Road Period was published in December 2014 and reissued with minor modifications in March 2015. This was the Road Investment Strategy: for the 2015/16 - 2019/20 Road Period (Department for Transport, March 2015).
- 2.47 The RIS includes a long term funding commitment by Government to support delivery of the programme. This is an important change of approach, which involves ring-fencing investment for the SRN in a way that takes it outside of the normal decisions on departmental budgets. This means that the schemes set out in the RIS have access to committed funding, allowing them to enter construction during Road Period 1 (2015/16 to 2019/20) or be developed into schemes for construction in Road Period 2 (2020/21 to 2024/25). This represents a level of commitment well beyond the level previously associated with investment on the SRN.
- 2.48 The objectives to be achieved in the RIS include:
 - As one of the "Schemes developed for the next Road Period", "A3 Guildford –
 improving the A3 in Guildford from the A320 to the Hogs Back junction with the A31,
 with associated safety improvements."
 - As schemes "Newly announced in this Investment Plan", both the "M25 Junction 10/A3 Wisley interchange improvement of the Wisley interchange to allow free-flowing movement in all directions, together with improvements to the neighbouring Painshill interchange on the A3 to improve safety and congestion across the two sites" and the "M25 Junctions 10-16 upgrading the M25 between junction 10 (A3) and junction 16 (M40) through a mixture of enhancements, including hard shoulder running between junctions 15 and 16, as well as four-lane through-junction running between junctions 10 and 12."
- 2.49 (Highways England's Preferred Route Announcement for the M25 Junction 10/A3 Wisley interchange scheme in November 2017 proposes a preferred scheme which departs from the description in the RIS.)

- 2.50 Accordingly, the Road Investment Strategy for the 2015/16-2019/20 Road Period (Department for Transport, March 2015) is the primary reference source for the following schemes included in the Infrastructure Schedule:
 - SRN2 'A3 Guildford (A320 Stoke interchange junction to A31 Hog's Back junction)
 'Road Investment Strategy' scheme (E31)' (referred to, for shorthand in this report, as the SRN2 A3 Guildford RIS scheme)
 - SRN3 'M25 Junction 10/A3 Wisley interchange 'Road Investment Strategy' scheme (E16)'
 - SRN5 'M25 Junctions 10-16 'Road Investment Strategy' scheme (E15)'.
- 2.51 The reference codes E31, E16 and E15 are those used in the RIS. The likely cost for these schemes in the RIS were shown as ranges, in each case from £100-250 million. These cost ranges have been reproduced in the Infrastructure Schedule.
- 2.52 Highways England made its Preferred Route Announcement for the M25 Junction 10/A3 Wisley interchange 'Road Investment Strategy' scheme in November 2017 and will formally consult on its proposals in 2018. This follows a consultation on Highways England's early proposals for this scheme which was held between December 2016 and February 2017.
- 2.53 The Strategic Highway Assessment Report: Guildford Borough Proposed Submission Local Plan "June 2016" (Surrey County Council, June 2016) (hereafter the SHAR 2016) found that the implementation of the three RIS schemes is required to be able to accommodate future planned growth both within and outside the borough. The addendum to the SHAR 2016 (Guildford Borough Council, June 2017) found that the key changes made to proposed site policies and to the programme of transport schemes in the Regulation 19 Local Plan (2017) are not considered likely to change the SHAR 2016's conclusion.
- 2.54 Highways England has developed several targeted improvement schemes for the Guildford section of the A3, primarily to improve road safety but also providing some congestion relief.
- 2.55 In March 2017, the Government committed funding for two of these schemes, namely:
 - SRN7 'A3 northbound off-slip lane widening to Tesco roundabout'
 - SRN8 'A3 southbound off-slip lane widening to A320 Stoke Interchange improvement scheme'.
- 2.56 Scheme SRN7 involves the widening of the northbound A3 northbound off-slip to Tesco roundabout at Egerton Road to provide additional queuing space on the slip road. This will reduce queuing traffic blocking the mainline carriageway of the A3 during busy periods. This will improve road safety and reduce congestion on the mainline carriageway. Scheme SRN8 involves widening of the A3 southbound off-slip to A320 Stoke Interchange. It has similar benefits to scheme SRN7.
- 2.57 These will be delivered earlier than the SRN2 A3 Guildford RIS scheme
- 2.58 There are also two further targeted improvement schemes under development by Highways

England, but which are not yet committed, namely:

- A3 Guildford average speed camera/road safety scheme
- Beechcroft Drive new access road/road safety scheme
- 2.59 We understand that both schemes remain under development and consideration by Highways England and accordingly we have included them as 'aspirational' schemes in the Guildford Borough Transport Strategy 2017 (Guildford Borough Council, December 2017). These schemes are, however, not included in the Infrastructure Schedule.
- 2.60 We refer to all four of the above schemes collectively as "early, targeted improvement schemes" in the Guildford Borough Transport Strategy 2017 (Guildford Borough Council, December 2017).
- 2.61 The Department of Transport's DfT Circular 02/2013 The Strategic Road Network and the delivery of sustainable development (Department for Transport, 10 September 2013) advises that "Capacity enhancements and infrastructure required to deliver strategic growth should be identified at the Local Plan stage." In addition, "proposals for the creation of new junctions or direct means of access may be identified and developed at the Plan-making stage in circumstances where it can be established that such new infrastructure is essential for the delivery of strategic planned growth."
- 2.62 In providing appropriate vehicular access for the strategic sites, it is proposed that the following improved junctions with the A3 trunk road will be delivered by developers in whole:
 - SRN4 'New A3/A3100 Burpham junction with relocated A3 southbound off-slip and new A3 southbound on-slip (to principally serve Gosden Hill Farm site)'
 - SRN9 'A3 northbound on-slip at A247 Clandon Road'
 - SRN10 'A3 southbound off-slip at A247 Clandon Road'.
- 2.63 The concepts of these schemes have been developed in conjunction with Surrey County Council and through consultation with Highways England.
- 2.64 In addition, the promoters of the strategic sites have already established development teams. As part of their early discussions with Highways England, Surrey County Council and Guildford Borough Council, 'front door' access strategies have been developed which provide primary vehicular access to their sites and mitigate the largest impacts of these developments on the adjacent highway networks, including the SRN.
- 2.65 In particular, scheme SRN4 proposes a new A3/A3100 Burpham junction with a relocated A3 southbound off-slip and new A3 southbound on-slip. This scheme has been proposed by the promoters of the Gosden Hill Farm site (site allocation Policy A25). As well as serving the new development, the scheme will also allow existing residents and businesses in Burpham and Merrow to access the southbound A3 without having to drive through Guildford to access the A3 at the A322 interchange junction. The new junction (scheme SRN4) is to be funded by the developer of the Gosden Hill Farm site.
- 2.66 New north facing junctions to the A3 are also proposed at the A247 Burnt Common

interchange. These accesses are referenced as SRN9 'A3 northbound on-slip at A247 Clandon Road' and SRN10 'A3 southbound off-slip at A247 Clandon Road' in the Infrastructure Schedule. These junctions are being promoted to mitigate the impact of the level of strategic planned growth and in particular the development traffic flows resulting from the development of a new settlement at the former Wisley airfield site (site Policy A35), as well as limiting any increase in traffic joining and leaving the A3 at the Ockham interchange. Highways England's new 'M25 to Solent Route Strategy' (March 2017: p.22) recognises these schemes as follows:

"Opportunities have also been identified to the north of Guildford for including ... the introduction of north-facing slips at the A3/A247 at Ripley to support local plan aspirations and relieve some pressure on local roads accessing the A3 at Guildford."

Summary

- 2.67 The present form and standard of the SRN serving the borough is deficient in quality and capacity, most particularly:
 - The A3 through the urban area of Guildford experiences significant, recurrent congestion, a strong adverse relationship with traffic conditions on the LRN, a high accident rate, significant issues of noise and community severance.
 - The M25 Junction 10/A3 Wisley interchange experiences which experiences significant, recurrent congestion and has a poor safety record.
- 2.68 In recognition of these issues, the Government, through the first RIS, has mandated Highways England to transform the A3 trunk road, its junction with the M25 motorway and the M25 motorway northwards from this junction, all within our borough. These schemes are under development. The implementation of all three RIS schemes is required to be able to accommodate future planned growth both within and outside Guildford borough.
- 2.69 The Government has committed funding for two early, targeted improvement schemes for the Guildford section of the A3, primarily to improve road safety but also providing some congestion relief. A further two targeted improvement schemes are also under development.
- 2.70 Three improved junctions with the A3 trunk road are proposed to be delivered by developers in order to achieve appropriate vehicular access to their sites.

Local Road Network

Lead agency	Surrey County Council
Key reports and data	 Surrey Transport Plan: Executive Summary (Surrey County Council, May 2017) Surrey Transport Plan: Introduction (Surrey County Council, October 2017) Surrey Transport Plan: Air Quality Strategy (Surrey County Council, January 2016) Surrey Transport Plan: Congestion Strategy (Surrey County Council, July 2014) Surrey Transport Plan: Parking Strategy (Surrey County Council, April 2011) Surrey Future Congestion Programme 2014 (Surrey County Council et al., 2014) Transport Statistics for Surrey: Movement Monitoring Report 2008/9 (Surrey County Council, 2009) Travel SMART in Surrey: Surrey's Large Bid to the Local Sustainable Transport Fund (Surrey County Council, 2011) Surrey County Council Local Committee (Guildford) – Travel SMART programme close overview (Surrey County Council, 22 June 2016) Guildford Town and Approaches Movement Study: Strategy Report (Arup, March 2015) Borough, Economy and Infrastructure EAB Report: Sustainable Movement Corridor – Update (Guildford Borough Council, February 2017) Executive Report: Declaration of an Air Quality Management Area in The Street, Compton (Guildford Borough Council, 28 November 2017) UK plan for tackling roadside nitrogen dioxide concentrations: An overview (DEFRA et al, July 2017) Noise Action Plan: Roads (Including Major Roads) – Environmental Noise (England) Regulations 2006, as amended (Defra, January 2014) Strategic Highway Assessment for the Guildford borough Proposed Submission: strategy and sites – (Surrey County Council, June 2016) Addendum to Guildford Borough Proposed Submission Local Plan: Strategy and sites "June 2016" Strategic Highway Assessment Report: High level review of potential traffic impacts of key changes in the Guildford Borough Proposed Submission Local Plan: strategy and sites "June 2017" (Guildford Borough Council, June 2017) <l< td=""></l<>

Context

- 2.71 Surrey County Council is the Local Highway Authority responsible for the maintenance and improvement of adopted local roads in the county, including footways (which are considered separately in the section on 'Active modes'), which collectively comprise the Local Road Network (LRN). The LRN provides connections to every settlement in our borough, with roads ranging from major A classified roads, such as the A31 Hog's Back, to unclassified roads. Every journey which either begins or ends in our borough, whether by foot, cycle, bus, train or car, will use the LRN for at least part of the route. As the Local Highway Authority, Surrey County Council is a statutory consultee on planning matters and negotiates improvements to the LRN to mitigate the impacts of development. Surrey County Council is also the Local Transport Authority, with responsibility for transport policy and initiatives through the Surrey Transport Plan, which is the county's third Local Transport Plan (LTP3).
- 2.72 Guildford Borough Council manages on-street parking in Guildford borough on behalf of Surrey County Council.
- 2.73 Traffic flows on the LRN/SRN in Surrey are far higher than those experienced nationally. For instance, in 2008, traffic flows on A roads in Surrey, including both trunk roads which form part of the SRN and county maintained roads which are not, averaged 21,400 vehicles per day (AADT), 64 per cent higher than the then national average (13,079 vehicles per day) (Surrey County Council, 2009). Although traffic flows in Surrey are far higher than those experienced nationally, the growth in traffic in Surrey over the last twenty years has been less than experienced nationally. This could suggest that traffic growth has been controlled well by transport schemes, and or that the LRN is heavily congested and near capacity in peak periods and that traffic can no longer grow as much.

Existing provision

- 2.74 The LRN provides connections to all the settlements in the borough via a combination of roads. This system of roads classification directs motorists towards the most suitable roads for reaching their destination.
 - A roads major roads providing large-scale transport links within or between areas
 - B roads connect different areas and feed traffic between A roads and smaller roads on the network
 - Classified unnumbered smaller roads connecting unclassified roads with A and B roads, and often linking a housing estate or a village to the rest of the network.
 Sometimes also called minor roads or C roads.
 - Unclassified most roads in the network. Intended for local traffic.
- 2.75 Most of the borough's A classified LRN roads radiate out from Guildford:
 - the A320 joins Woking
 - the A322 provides a route to the M3 and to Bracknell
 - the A323 provides a route to Ash, Tongham and Aldershot
 - the A25 links to Dorking, Reigate and Redhill
 - the A246 serves Leatherhead and Epsom
 - the A3100 links to Godalming

- the A281 serves Cranleigh, and
- the A31, which runs along the elevated ridge of the Hog's Back, provides the western main route to Farnham and onwards to the county boundary. Other destinations can be reached via the A331 Blackwater Valley Route which the A31 intersects.
- 2.76 In Guildford town centre, four of these seven A roads (A31 Farnham Road, A322 Onslow Street, A281 Millbrook and A3100 Portsmouth Road) converge at the one-way gyratory system. Other A roads in Guildford town include the A246 York Road and the A3100 High Street (upper section).
- 2.77 The road network in Guildford town, particularly in and around the town centre, has developed over centuries. Major changes took place in the twentieth century as cars became a mainstream mode of transport. The original settlement of Guildford developed as a 'gap town' in the pass in the North Downs where the River Wey is forded by an ancient trackway, the Harrow Way which follows the line of the North Downs. The most recent set of major changes to the road network were made in the 1970s. The development of the road network has been constrained by the physical topography of the area, the River Wey and its navigation, the historic fabric of the town including the rail lines constructed in the nineteenth century, and various environmental designations from the mid-twentieth century onwards. To this day, north-south vehicular movements between the wider urban area of Guildford town and towns and villages to the south are funnelled through the town centre in the area now configured as the one-way gyratory system.
- 2.78 As described in the SRN section, the A3 trunk road bisects the urban area of Guildford.
- 2.79 The A331 Blackwater Valley Route to the west provides a good connection to Ash, Tongham, Aldershot and the M3 motorway, which runs through Surrey Heath borough. The A324 connects Ash and Tongham to Woking, via Pirbright village.
- 2.80 In the east of the borough, the principal roads generally run in an east-west direction, reflecting the presence of the North Downs. These include the A246 from Leatherhead to West Clandon and the A248, which passes through Chilworth, Shalford and Peasmarsh. Exceptions are the A247, which runs north from Clandon crossroads, through West Clandon and Send towards Woking, and part of the A25 that runs north-south.
- 2.81 There are a range of parking controls used in Guildford borough including:
 - Guildford town controlled parking zone covers Guildford town centre and surrounding residential areas. The zone is divided into catchment areas. The controls reduce congestion and increase safety and control the way parking space is used.
 - curfew-type parking controls restricting parking to short term (one or two hours) to prevent all day parking by non-residents, for instance near rail stations
 - controls that limit parking problems caused by parents dropping off or picking up children from school
 - parking controls that allow or prevent parking on footways
 - parking controls for disabled people with blue badges, where on-street parking is otherwise controlled

- and parking controls that allow suppliers to deliver, load or unload goods.
- 2.82 Off-street parking facilities such as public car parks are not part of the LRN and are not considered further in this section.

Demand and impacts

Movement

- 2.83 The A principal roads in the Guildford urban area are heavily trafficked. The main radial roads to the town centre each carry, on average, 15,630 vehicles a day, with 18 per cent of traffic within the peak hours of 08:00–09:00 and 17:00–18:00 (Surrey County Council, 2011). These roads are congested at peak times, most particularly on the one-way gyratory system and its approaches. This affects bus journey times and timekeeping. On the main routes into the town during the morning peak period, the average traffic speed is just 14mph (Surrey County Council, 2011).
- 2.84 Recent evidence with respect to traffic trends over the period 2008-2015 suggest that morning peak period traffic flows on the main routes entering and exiting Guildford were flat between 2008 and 2011 and have shown a gradual decrease since 2011 (Guildford Borough Council, February 2017) whilst journey time data for six routes through Guildford between 2008/09 and 2013/14 found a mixed picture, with an improvement in journey times on key southbound routes and a marginal deterioration in the northbound routes (Surrey County Council, 2016).
- 2.85 In the west of the borough, incidents on the A331 Blackwater Valley Route and the A31 Hog's Back can cause rat-running on roads in Ash and Tongham, particularly on Oxenden Road and Manor Road. Both these roads are used to access the A331 and are congested at peak times, particularly the approaches to the A331 roundabout and the Greyhound roundabout respectively. The level crossing on the A323 Ash Church Road by Ash Station also experiences build up of traffic at peak times which results in traffic rat-running on inappropriate roads to avoid the crossing. Although the road carries significant volumes of traffic, this is considered to be limited by the presence of the level crossing, which is closed around eight times each hour, which can amount to up to 25 minutes each hour. The downtimes are predicted by Network Rail to increase significantly within the Local Plan period and is a current safety issue for them.
- 2.86 To the east of the borough, the A25 carries a significant volume of through traffic. It passes through a number of villages, and has an adverse effect on the local community in terms of severance and local environmental impacts.
- 2.87 The Environment Act 1995 established a system of Local Air Quality Management whereby local authorities review current and likely future, air quality. If concentrations of pollutants exceed the Government's national air quality objectives at 'relevant receptors' for exposure, which are typically where people live or spend prolonged periods of time, an Air Quality Management Area (AQMA) is designated and an action plan is formulated to address the issues. In November 2017, Guildford Borough Council declared an AQMA in an area of Compton due to a breach of the national annual mean level of nitrogen dioxide (NO2) air quality standard. This is the first and, at present, only AQMA in the borough. The Council will shortly undertake consultation on a

draft action plan. The aim of the action plan is to implement measures to reduce the annual mean level of NO2 to below the air quality standard. When this is achieved, the AQMA can be revoked. The draft action plan features traffic management measures, as the source apportionment for the AQMA showed the primary source of the air pollution was from diesel cars and diesel light goods vehicles.

- 2.88 Defra's UK plan for tackling roadside nitrogen dioxide concentrations (July 2017) identified a straight-line exceedance of the statutory annual mean limit value for NO2 along a stretch of the A331 Blackwater Valley Road in Guildford, Rushmoor and Surrey Heath districts. Guildford Borough Council, Rushmoor Borough Council and Surrey Heath Borough Council are required to undertake local assessment to consider the best option to achieve the statutory NO2 limit values within the shortest possible time and to each produce a local action plan by March 2018. The Council is undertaking a feasibility study working in partnership with these councils and also Surrey County Council and Hampshire County Council.
- 2.89 Sections of the A31 Hog's Back, A322 Worplesdon Road, A320 Woking Road and A25 Ladymead are identified as First Priority Locations for noise action planning (Defra, 2014). The same source designates sections on the A322 Woodbridge Road, A281 Millbrook, A281 Shalford Road, A320 Woking Road, A322 Worplesdon Road in Guildford, the A331 Blackwater Valley Route and A323 Aldershot Road in Ash, as Important Areas for Noise Action Planning.

On-street parking

- 2.90 The average number of cars or vans per household in Guildford borough increased from 1.45 to 1.50 between 2001 and 2011 (Census data). By 2011, 86.1 per cent of households had one or more cars or vans available and in 2016, there were a total of 86,200 cars and vans registered in the borough (vehicle licensing data). Increasing car availability is reflected in more widespread and intense on-street parking problems in the area. Demand for on-street parking in Guildford borough also comes from those travelling here from other areas such as for work or leisure.
- 2.91 The Surrey Transport Plan: Parking Strategy (Surrey County Council, 2011) states that it is increasingly necessary to encourage motorists to park in certain places while prohibiting them from parking in others, to limit congestion caused by parked vehicles, so helping traffic to flow.
- 2.92 There are a number of parking issues frequently raised by residents, businesses and road users. These concern a lack of available parking space, inconsiderate parking, or a combination of the two. Increasing the amount of on street parking space is rarely possible and so Surrey County Council has to make best use of the limited space, to provide parking for those that most need it while not ignoring the broader requirements of all road users. By restricting parking where demand exceeds supply, and providing other ways to access such areas, pressure on the space available can be better controlled.
- 2.93 There is particular concern about on-street parking, which is a particular issue in the Westborough and Park Barn areas. These neighbourhoods are close to both the main University of Surrey campus and other facilities on the Manor Farm site, including the Surrey Sports Park,

the Royal Surrey County Hospital and the Surrey Research Park.

Planned provision

- 2.94 The Infrastructure Schedule includes a number of highway schemes designed either to increase capacity or to manage the impact of additional traffic on the LRN.
- 2.95 As set out above, the promoters of the strategic sites have already established development teams. As part of their early discussions with Highways England, Surrey County Council and Guildford Borough Council, 'front door' access strategies have been developed which provide primary vehicular access to their sites and mitigate the largest impacts of these developments on the adjacent highway networks.
- 2.96 Where schemes were judged to be required to mitigate for strategic sites they were identified separately, for example LRN7 'Interventions to address potential highway performance issues resulting from development at Land at former Wisley airfield site'.
- 2.97 Where hotspots were identified and required to be addressed as a result of the cumulative impact of the Submission Local Plan, schemes have been highlighted but not attributed to a particular site, for example LRN22 'East Horsley and West Horsley traffic management and environmental improvement scheme'.
- 2.98 Scheme LRN25, for the improvement of the junctions of the A281 Horsham Road, A248 Kings Road and A248 Broadford Road, which is located in Guildford borough, replicates a scheme included in Waverley Borough Council's Infrastructure Delivery Plan: Waverley Borough Submission Local Plan 1: Strategic Policies and Sites (Waverley Borough Council, December 2016: p.20), which supports the Waverley Borough Pre-Submission Local Plan Part 1: Strategic Policies and Sites (Waverley Borough Council, August 2016). This scheme is to be funded by the developer of the new settlement at the Dunsfold Aerodrome site. This scheme was required by planning condition and obligation under the recent planning permission for Dunsfold Park (Waverley Borough Council reference: WA/2015/2395). This planning application is presently called-in for consideration by the Secretary of State (Planning Inspectorate reference: APP/R3650/V/17/3171287).
- 2.99 As planning applications are considered for the sites identified in our Proposed Submission Local Plan, additional transport schemes to address site access and other localised issues will additionally be secured.
- 2.100 We will work with the Surrey County Council, the Local Enterprise Partnership and developers to realise these improvements.
- 2.101 Finally, Surrey County Council allocates around £0.2 million funding a year to the Guildford Local Committee for improvements known as integrated transport schemes. This funding delivers modest schemes, such as speed limit changes, new or improved pedestrian crossings and traffic calming measures.

Summary

- 2.102There are existing quality and capacity issues with the LRN. As a consequence there are interrelated issues with its performance.
 - Vehicular transport demand, principally during the morning and evening peak periods, approaches or exceeds the capacity of some links and junctions of the LRN in Guildford borough. Traffic congestion results, causing longer and less reliable journey times for road users in comparison to the conditions which prevail in off-peak periods.
 - Adverse impacts of high traffic volumes on communities through severance, noise, air pollution, demand for on-street parking and the setting and amenity of local neighbourhoods.
- 2.103 In the past, Surrey County Council's solution to alleviate traffic congestion was to build additional road capacity. This is no longer considered as always being the most appropriate means of addressing congestion (Surrey County Council et al., 2014). There are a number of reasons for this:
 - The potential environmental impacts and sustainability issues
 - The cost of providing additional capacity
 - The likelihood of current suppressed demand returning to the network and potential for additional 'generated' demand
 - The displacement of problems to other areas of the network.
- 2.104In addressing traffic congestion issues, Surrey County Council now advocates an approach which involves demand management, integrated land use and transport planning, network management, traffic management, freight and goods management, behavioural change, and, where a strong business case can be made, additional road capacity in relation to specific locations or where there are gaps in the network (Surrey County Council, 2014).
- 2.105 In this vein, whilst the site allocations and proposals in the Submission Local Plan including the significant programme of schemes to provide and improve opportunities to use active modes, bus and rail are intended to result in a modest modal shift over the period to 2034, we forecast that there will also be an absolute increase in overall traffic volumes.
- 2.106 Accordingly, the Infrastructure Schedule includes a number of highway schemes designed either to increase capacity or to manage the impact of additional traffic on the LRN. These schemes will mitigate the principal adverse material impacts of the forecast future growth in traffic volumes on the LRN.

Public off-street car parking, available to members of the public for parking

Lead agency	 Guildford Borough Council, Surrey County Council and various parish councils Private owners and/or operators of publically available offstreet car parks including South Western Railway and First Great Western.
Key reports and data	 A Sustainable Parking Strategy for Guildford 2016 (Guildford Borough Council, 2016) Parking Business Plan 2017 (Guildford Borough Council, 2017) Guildford Town Centre Parking Strategic Review – Stage 1: Parking Demand (Steer Davies Gleave, September 2013) Guildford Town Centre Parking Strategic Review – Stage 2: Car Parking Management Proposals (Steer Davies Gleave, September 2013) Guildford Borough Transport Strategy 2017 (Guildford Borough Council, December 2017)

Context

2.107 The National Planning Policy Framework (DCLG, March 2012) states that local authorities should seek to improve the quality of parking in town centres so that it is convenient, safe and secure.

Existing provision

2.108 Public off-street car parking is available in Guildford, predominantly in the town centre, in villages and at rail stations across the borough.

Guildford Town Centre

- 2.109 There are currently around 5,100 public off-street car parking spaces in Guildford town centre on weekdays. These spaces are provided across a number of car parks; there are 16 public car parks available seven days a week with another seven available for part of the week mainly on Saturday and Sunday. There are five multi-storey car parks located at Bedford Road, Farnham Road, Leapale Road and Castle which account for over half of the total town centre provision. The biggest of these is Bedford Road, which has just over 1,000 spaces. There are also privately run car parks below Debenhams (approximately 60 spaces), at Waitrose (170 spaces), Guildford (mainline) station (420 spaces) and at London Road (Guildford) station (113 spaces). This makes a total of around 5,800 public car park spaces serving the town.
- 2.110 The general thrust of the Council's approach is to provide short-stay parking in the centre of Guildford to support the local retail offer, while commuters are encouraged (by pricing mechanisms) to use the longer stay car parks toward the edges of the town centre and the four Park and Ride sites outside the town. Car parking provided by the Park and Ride system in

Guildford is described in the later section on 'Bus services, Park and Ride and coach services'.

Villages and rail stations

2.111 Public off-street parking is available at eleven of the twelve rail stations in the borough (Chilworth has no parking), although this is limited, and is often full from early morning. There are a number of other car parks, available to members of the public for car parking, including car parks in Kingspost Parade in Burpham, Epsom Road local centre in Merrow, Shere, Ripley, East Horsley and Newland's Corner.

Demand and impacts

- 2.112 The Council commissioned a review to assess the future need for public off-street car parking in Guildford town centre, which looked at the current provision and considered anticipated future development. (Steer Davies Gleave, September 2013). The study concluded that the current level of parking provision could be sufficient during weekdays. The study found that on Saturdays the provision of short stay parking in the town centre would be less than required but this demand could be met if short stay users where persuaded to use the long stay car parks further from the centre. Various assumptions on which the conclusions were based are now considered to have changed or to not meet good practice in the provision of parking in town centres (Guildford Borough Council, 2016), Accordingly, the parking strategy as set out in the A Sustainable Parking Strategy for Guildford 2016 (Guildford Borough Council, 2016) has been formulated on the basis that there is a need for around a 5% increase in the provision of off-street public parking, with the remaining unmet forecast future increase in demand to be absorbed by a modal shift to travel by bus, rail and active modes. The 5% future increase in the provision of public parking will absorb the ongoing reduction in the provision of on-street parking and accommodate longer stay lengths which may result from a potential redistribution of parking capacity as described below.
- 2.113 Roads in Guildford town centre carry high volumes of traffic and are subject to recurrent traffic congestion during peak periods, especially the gyratory and its immediate approaches. Over the weekday hours of 07:00-19:00, around a quarter of car trips passing through the Guildford gyratory either begin or end at a public car park in the town centre. This is, in part, a consequence of a mismatch between the demands for, and supply of, public off-street car parking on the different approach roads. Accordingly, the Council's parking policy (Guildford Borough Council, 2016) also seeks to provide sufficient convenient parking on each route into the town, in order to intercept trips that would otherwise drive through the Guildford gyratory to reach or return from an off-street car park on another route. This involves reviewing the spatial distribution of car parking and could lead to a redistribution of the available off-street parking provision. It is considered that this will result, overall, in longer stay lengths due to the extra time that the average customers will spend walking to and from the parking spaces as they are redistributed.
- 2.114The Submission Local Plan provides planning policy support for this approach. Policy ID3 at point (11) is that 'The provision of additional public off-street car parking in Guildford town centre will be supported when it facilitates the interception of trips that would otherwise drive through the Guildford gyratory.' The parking policy and the complementary planning policy is designed to reduce the impact of these trips on traffic volumes and congestion in the town

centre. This planning policy will complement future environmental improvements in the town centre, realising the Council's 'drive to, not through' concept.

Planned provision

- 2.115 The thrust of the Council's parking policy (Guildford Borough Council, 2016) and related planning policy in the Submission Local Plan is described above. The Parking Business Plan 2017 (Guildford Borough Council, 2017) sets out the Council's development plans for public off-street car parking for the coming years. It includes the following infrastructure schemes, or projects which may result in future infrastructure schemes, which will contribute to the improvement of the quality of parking in Guildford town centre:
 - Work on the development of Guildford Park car park project, which will deliver a multi storey car park as part of the redevelopment of the site which will replace the current surface car park
 - Consider ways of improving Leapale Road Multi Storey Car Park
 - Look to use modern technology including telephone apps and automatic number plate recognition to provide better customer service and a more efficient operation
 - Improve signage for pedestrians and drivers
 - Introduce electric charging points in two key interceptor car parks.

Summary

- 2.116 Public off-street car parking is available in Guildford, predominantly in the town centre, and in villages and at rail stations across the borough. The Council is planning for a modest 5% increase in the provision of off-street public parking in Guildford town centre, with the remaining unmet forecast future increase in demand to be absorbed by a modal shift to travel by bus, rail and active modes. The 5% future increase in the provision of public parking will absorb the ongoing reduction in the provision of on-street parking in Guildford town centre and accommodate the longer stay lengths which will result from a potential redistribution of parking capacity, the aim of which is to intercept trips that would otherwise drive through the Guildford gyratory.
- 2.117 A number of infrastructure schemes, or projects which may result in future infrastructure schemes, which will contribute to the improvement of the quality of parking in Guildford town centre, are set out in the Parking Business Plan 2017 (Guildford Borough Council, 2017).

Bus services, Park and Ride and coach services

Lead agency	 Commercial bus and coach operators Surrey County Council – commission socially necessary bus services, subsidise the Park and Ride bus services and other bus services Guildford Borough Council – operates the Park and Ride car park sites, and its Major Projects team, working with Surrey County Council as Local Highway Authority, responsible for development of Sustainable Movement Corridor project and also a project considering the provision of new Guildford town centre bus facilities
Key reports and data	 Surrey Transport Plan: Passenger Transport Strategy: Part 1 - Local Bus (Surrey County Council, July 2014) Guildford Town and Approaches Movement Study: Strategy Report (Arup, March 2015) Guildford Borough Transport Strategy 2017 (Guildford Borough Council, December 2017)

Context

- 2.118 Bus services in Surrey are operated by approximately 30 bus operators. These range from community transport operators to small independent companies to subsidiaries of large international passenger transport operating groups.
- 2.119Bus operators run many commercial bus services at their own financial risk. Timetables and fares are set by the bus operators. Surrey County Council works in partnership with operators to deliver improvements to their services.
- 2.120 Surrey County Council also commissions socially-necessary bus services where these cannot be provided on a commercial basis.
- 2.121 National Express Coaches operate a London to Portsmouth coach service that stops in Park Barn in Guildford. Heathrow airport can also be reached on the Woking RailAir coach service from Woking rail station. This is also operated by National Express Coaches.

Existing provision

- 2.122The pattern of bus services consists of local Guildford routes and a network of longer distance interurban routes. These interurban routes serve Dorking, Cranleigh, Leatherhead, Staines, Kingston, Haslemere, Farnham, Aldershot, Bagshot and Camberley.
- 2.123The villages have less frequent bus services, which provide limited connections during evenings and on Sundays.
- 2.124Most of the bus routes in the borough converge on Guildford bus station, although this is less true for bus routes passing through the Blackwater Valley area of the borough. The bus station

is located on Commercial Road close to the main shopping areas of the town and a short walk from Guildford rail station. The present appearance of the bus station is poor, with backward looking buildings on the perimeter and corrugated iron bus shelters. It makes a poor first impression and does not offer a pleasant, welcoming experience to the town for bus passengers.

- 2.125 Guildford is the only Surrey town where a Park and Ride network has been implemented. There are four existing sites at Spectrum, Merrow and Artington and Onslow that intercept traffic entering Guildford from the north, east, south and west respectively.
- 2.126 From the north, the main roads used by buses to access the town centre are Woodbridge Road/Onslow Street and Stoke Road/Chertsey Street. Buses accessing the town centre from the east do so primarily via Epsom Road and London Road. On each of these approaches, traffic congestion affects bus route efficiency and effectiveness. There are some short stretches of bus lane in Guildford town; eastbound on the A25 Parkway and southbound on Onslow Street.
- 2.127 National Express Coaches operate a London to Portsmouth coach service that stops in Park Barn in Guildford. Heathrow airport can also be reached on the Woking RailAir coach service from Woking rail station. This is also operated by National Express Coaches.

Demand and impacts

2.128On an average day, the Park and Ride bus services replace some 1,000-1,500 return car journeys from key radial road corridors to Guildford town centre during their hours of operation (7.30am-7.30pm).

Planned provision

- 2.129 A Sustainable Movement Corridor is an element of the Guildford Borough Transport Strategy 2017 (Guildford Borough Council, December 2017) and is considered necessary to deliver the level of strategic planned growth in the Guildford urban area in a sustainable way. Journeys on the Sustainable Movement Corridor will be rapid and reliable by bus and safe and direct on foot and by bike.
- 2.130 It is anticipated that the Sustainable Movement Corridor will link:
 - Guildford town centre and rail station
 - Ladymead Retail Park
 - Royal Surrey County Hospital
 - University of Surrey's Stag Hill and Manor Park campuses
 - Surrey Research Park
 - Slyfield Industrial Estate
 - existing urban communities in seven wards
 - new rail stations at Guildford West (Park Barn) and Guildford East (Merrow);
 - Park and Ride at Onslow and the new Gosden Hill Farm facility

- the new communities at Blackwell Farm (Policy A26), SARP (Policy A24) and Gosden Hill Farm (Policy A25).
- 2.131 The Sustainable Movement Corridor is anticipated to be delivered over the plan period to 2034.
- 2.132 In addition to the Sustainable Movement Corridor schemes (SMC1, SMC2, SMC3, SMC4, SMC5 and SMC6) and new Park and Ride facility at the Gosden Hill Farm site (P&R1), which is dealt with later in this section, five bus transport schemes are included in the Submission Local Plan.
- 2.133 Scheme BT1 'New Guildford town centre bus facilities' relates to site Policy A6 'North Street redevelopment, Guildford'. This site includes the existing bus station and therefore, with potential redevelopment of this site for a mixed use scheme, the bus interchange facilities are to be provided in a suitable alternative arrangement to be located either partly or wholly on or off site. Any new facilities will need to be designed in conjunction with Surrey County Council and the bus operators.
- 2.134 Schemes BT2 and BT3 both relate to site Policy A35 'Land at former Wisley airfield, Ockham'. This site is allocated for a residential led mixed use development including approximately 2,000 homes. As part of the sustainability improvements for the site, it is considered a bus interchange at Effingham Junction rail station or alternatively Horsley rail station will be necessary to enable future site residents and visitors to access rail services. This is scheme BT2.
- 2.135 Scheme BT3 proposes a significant bus network to serve the site and key destinations including Effingham Junction railway station and/or Horsley railway station, Guildford, and Cobham to be provided and secured in perpetuity. As part of the sustainability improvements for the site, the requirement for this scheme is also set out in the site Policy A35. Most importantly, as bus is the most realistic alternative mode of transport to the private car for providing access for the majority of site residents and visitors to and from the nearest rail stations, and with the current constraints on public transport budgets, it is essential that the bus services are provided and secured in perpetuity for this site.
- 2.136 Schemes BT5 and BT6 require the provision of significant bus networks serving the Gosden Hill Farm (Policy A25) and Blackwell Farm (Policy A26) urban extensions respectively. In both cases, the bus networks are to serve key destinations including the eastern and western suburbs respectively and Guildford town centre.
- 2.137A new park and ride site is proposed as P&R1 in the Infrastructure Schedule. This scheme will be delivered by the developer of the Gosden Hill Farm site (Policy A25). The approach to Guildford on the A3 southbound has been identified as a current 'gap' in the Park and Ride network for Guildford that could provide an alternative option for drivers on the A3 travelling southbound with destinations in Guildford town centre.
- 2.138The new Park and Ride site will connect to the Sustainable Movement Corridor that is described above.

Summary

- 2.139 New and improved bus transit infrastructure and services will progressively enhance the opportunities for making sustainable mode choices.
- 2.140 Guildford town centre bus facilities will be provided in a suitable alternative arrangement to be located either partly or wholly on or off the North Street site. Any new facilities will need to be designed in conjunction with Surrey County Council and the bus operators.
- 2.141We are working with Surrey County Council and other partners to develop a package bid of key elements to the Local Enterprise Partnership. We will have started delivering the Sustainable Movement Corridor from the west of the town by 2020, providing rapid and reliable bus journeys in Guildford urban area.
- 2.142 Significant bus networks will serve the proposed urban extensions of Guildford at Gosden Hill Farm and Blackwell Farm and also the new settlement at the former Wisley airfield. These will be delivered through developer funding.

Active modes

Lead agency	Surrey County Council
Key reports and data	 Surrey Transport Plan: Cycling Strategy 2014-2026 (Surrey County Council, 2014) Guildford Local Cycling Plan (Surrey County Council, undated circa 2015) Rights of Way Improvement Plan for Surrey (Surrey County Council, 2014) Guildford Town and Approaches Movement Study: Strategy Report (Arup, March 2015) Guildford Borough Transport Strategy 2017 (Guildford Borough Council, December 2017) Statistics – Local area walking and cycling in England: 2014 to 2015 (Department for Transport, July 2016)

Context

- 2.143As the Local Highway Authority, Surrey County Council is responsible for the maintenance and improvement of footways on adopted local roads in the county. Surrey County Council is also responsible for the management and improvement of the 3,444km rights of way network, including public footpaths and bridleways in the borough.
- 2.144Other parties, including Guildford Borough Council, parish councils, the train operators South Western Railway and First Great Western as well as other private interests, manage other spaces, including public spaces, used by pedestrians and/or cyclists.

Existing provision

Pedestrians

- 2.145On most LRN roads in Guildford town and in the villages there is at least one footway, and usually two. Pedestrian crossings are commonplace.
- 2.146In Guildford town centre, there is significant priority for pedestrians; on High Street, North Street, around the castle and on the lanes that connect them.
- 2.147 However, around the gyratory and on its approach roads, it is quite challenging for people travelling on foot. There are unclear and indirect routes, narrow footways, extensive guardrailing and several subways, which can feel intimidating at night. The northern footway on Bridge Street is thought to be busiest in Surrey; we counted some 11,200 pedestrians using this link during a 12 hour (7.00am-7.00pm) period in the run-up to Christmas in 2012.
- 2.148A first phase of the Guildford Wayfinding signage system was installed in Guildford town centre in 2015.

Cycle routes

- 2.149There are a number of existing cycle routes in the borough.
- 2.150To the west of the borough, existing routes run throughout Ash and Tongham wards to the west of the borough with one main route into Guildford town centre, namely the Christmas Pie Trail which is an off road trail for pedestrians and cyclists that connects the south of Ash and Tongham to the north west of Guildford via Ash Green, Flexford and Wood Street Village. The rest of the western area of the borough is poorly catered for with no existing provision in the north western wards of Pirbright and Normandy.
- 2.151 National Cycle Route (NCR) 22 connects Guildford and Rowledge, south of Farnham following mainly quiet roads and bridleways to the south of the Hog's Back. NCR 223 connects Woking town centre via Sutton Green to Guildford town centre.
- 2.152To the east of the borough, one existing route runs from the north-eastern ward of Lovelace through Send and into the town centre. The rest of the eastern wards and parishes have no provision.
- 2.153The Downs Link is a 37-mile footpath and bridleway, available to cyclists, linking the North Downs Way at St Martha's Hill with the South Downs Way in West Sussex. There is a cycle track beside the A281 Millbrook which connects with the Downs Link south of the town.
- 2.154There is some cycle provision in Guildford town centre connecting the communities in the wider urban area, with some segregated tracks on the A25 Ladymead although the overall provision is fragmented. As a guide, cycle lanes should be 1.5m 2m wide, depending on their circumstance. (source: DfT, 2008). Some existing cycle lanes are of insufficient width.
- 2.155 Some routes, such as those serving Shalford, are segregated from the highway (cycle tracks), whilst others are provided on road (cycle lanes).
- 2.156In 2016/17, Guildford Borough Council Council and the Enterprise M3 Local Enterprise Partnership funded the improvement of the National Trust's River Wey towpath at Parsonage Watermeadows. The first results indicate significantly increased usage.
- 2.157There are over 114 cycle parking stands around the town centre, each accommodating two bikes. In addition there are a further 378 stands at Guildford rail station, plus the Brompton bike hire scheme at Guildford Station, a cycle hire rental scheme at railway stations.

Demand and impacts

2.158 Figure 2.3 shows the percentage of residents (expressed as a percentage of residents of that area) who cycle or walk to get from place to place, as opposed to travelling for recreation, health, training or competition. For example, 9.6 per cent of all Guildford borough residents cycle at least once per month to get between places (as opposed to cycling for recreation, health, training or competition).

Area	Cycle	Walk		
	At least once per month	At least once per month	At least once per week	At least five times per week
Guildford borough	9.6	68.4	61.6	30.0
Surrey	7.4	62.5	54.7	23.7
England	6.5	60.4	53.2	24.6

Figure 2.3: Percentage of residents (expressed as a percentage of residents of that area) who cycle or walk for utility purposes at a given frequency in 2014/15

Planned provision

- 2.159We will widen transport choice by making the decision to walk or cycle easier and more pleasant. There are opportunities locally to improve the experience of pedestrians and cyclists in both our urban and rural communities, albeit these opportunities will vary from place to place.
- 2.160The committed scheme LRN1 'Guildford Town Centre Transport Package' and the Sustainable Movement Corridor schemes (SMC1, SMC2, SMC3, SMC4, SMC5 and SMC6) will realise a number of improvements for pedestrians and cyclists in the urban area of Guildford. In addition, the Submission Local Plan includes three active modes schemes. These are required to accommodate general growth in travel or to make sites acceptable.
- 2.161 Scheme AM1 'Guildford Wayfinding signage system Phase 2' is an extension of the signage system that was installed in Guildford town centre in 2015.
- 2.162Scheme AM2 'Comprehensive Guildford borough cycle network, excluding AM3' will be developed along the principles set out in Surrey County Council's Guildford Local Cycling Plan (Surrey County Council, undated circa 2015). The Guildford Local Cycling Plan was developed in 2015 under the auspices of the Guildford Local Committee which reviews issues and makes decisions on aspects of Surrey County Council's activities that might affect Guildford borough. It is considered that due to the Section 106 pooling restrictions, CIL contributions alongside Local Growth Fund funding will pay for many of the cycling improvements although site specific improvements will still be implemented where necessary through Section 278 Agreements (Highways Act 1980).
- 2.163Scheme AM3 relates to site allocation Policy A35 'Land at former Wisley airfield, Ockham'. It is considered that an off-site cycle network from the site to key destinations including Effingham Junction railway station, Horsley railway station/Station Parade, Ripley and Byfleet will be

- necessary to provide a real alternative to the use of the private car and it is intended that the developer will fund this scheme in its entirety. As part of the sustainability improvements for this site, the requirement for this scheme is also set out in Policy A35.
- 2.164There are five schemes in the Infrastructure Schedule which are identified explicitly as traffic management and/or environmental improvement schemes. These schemes have been identified through the Local Plan-making process. They have been included in the Infrastructure Schedule in order to address otherwise potential adverse impacts on communities and the environment including impacts on amenity and health, noise pollution and air pollution. These schemes will comprise measures which will reduce the environmental impact of vehicles by reducing conflict with more vulnerable road users such as cyclists and pedestrians. This is consistent with the aims of a sustainable transport policy in promoting cycling and walking.
- 2.165In terms of already committed schemes, the Guildford Town Centre Transport Package (scheme LRN1), includes the following committed active mode-focused schemes:
 - Replacement Walnut Bridge for pedestrians and cyclists
 - Improved and safer access between Guildford railway station and retail and leisure heart of town centre and Guildford College by walking and cycling
 - Improved A25 cycle corridor with additional segregation, including A25/A320 Stoke Crossroads improvement scheme
 - Experimental closure of Walnut Tree Close.
- 2.166In addition, during 2017/18, Guildford Borough Council, working with Surrey County Council, is undertaking public realm enhancements in Tunsgate, which is intended to complement the expected increased footfall from the opening of new Tunsgate Quarter redevelopment and reflecting the concentration of historic and cultural assets in this area of Guildford town centre. Improvements to the public realm in Castle Street and Chapel Street are under consideration for future years.
- 2.167 Finally, improvements to the rights of way network will be realised within the strategic framework provided by the Rights of Way Improvement Plan for Surrey (Surrey County Council, 2014), albeit we recognise that financial constraints mean that the funding of these improvements will be more difficult in the forseeable future.

Summary

2.168 There is significant scope for realizing improved and additional provision for pedestrians and cyclists in Guildford borough, particularly on the present LRN network. Significant investment is proposed through various transport schemes in the Infrastructure Schedule, including but not limited to the active mode-focused schemes.

3. Utilities

3.1 Private companies provide utilities infrastructure on a sub-regional basis. Delivery of infrastructure is based on forecast levels of population growth (natural population growth and new housing development) over areas defined by the companies rather than Local Planning Authorities. Utilities companies also generally use adopted development plans to identify infrastructure upgrade projects within their investment strategies. Companies are often unable to commit funding to schemes that do not have planning permission.

Wastewater treatment

Lead agency	Thames Water
_	 Water Quality Assessment 2017 Thames Water five year business plan Surrey Infrastructure Study 2016

Context

3.2 National planning policy (paragraph 156 of the National Planning Policy Framework (NPPF) advises that:

"Local planning authorities should set out strategic policies for the area in the Local Plan. This should include strategic policies to deliver... the provision of infrastructure for water supply and wastewater..."

- 3.3 Paragraph 162 of the NPPF requires that "Local planning authorities should work with other authorities to: assess the quality and capacity of infrastructure for water supply and wastewater and its treatment.....take account of the need for strategic infrastructure including nationally significant infrastructure within their areas."
- 3.4 Thames Water is responsible for the sewerage infrastructure in the whole borough.

Existing provision

3.5 The borough currently contains six wastewater treatment works (WwTW), which fall within the Borough's administrative boundary. These are located at Guildford (the Slyfield industrial estate), Wisley, Ripley, Hockford, Ash Vale and Godalming.

Planned provision

- 3.6 The GBC Water Quality Assessment (WQA), 2017 provides information at a level suitable to demonstrate that there are feasible wastewater treatment solutions to deliver growth for the preferred development allocations in the Submission Local Plan, including the policy required to deliver it. In so doing, it provides evidence that if delivered, these solutions will ensure no detriment to achieving legislative water quality targets in the receiving environment.
- 3.7 Of the WwTWs serving planned future development in the Borough, three (Ash Vale, Guildford and Ripley) do not have sufficient flow capacity and/or have insufficient treatment processes to accept all future development proposed within the plan period. Therefore, solutions are required in order to accommodate growth to ensure that the increased wastewater flow discharged does

- not impact on the current quality of the receiving watercourses, their associated ecological sites and also to ensure that the watercourses can still meet with legislative requirements.
- 3.8 Planned development in the Guildford WwTW and Ripley WwTW catchments will not result in the current permit⁴ headroom being exceeded; however, growth is likely to need investment in treatment processes at both the WwTW in order to prevent water quality deterioration and potential Water Framework Directive (WFD) compliance issues as a result of the use of treatment headroom. Detailed assessments have shown that improvements to Guildford and Ripley WwTWs are possible using wastewater treatment technologies currently available (conventional) for each phase of growth which would ensure the water quality targets in the River Wey can be achieved. This therefore demonstrates that an engineering solution is feasible and hence treatment capacity should not be seen as a barrier to growth at these WwTWs.
- 3.9 Growth in the Ash Vale catchment will be likely to cause the current permit headroom to be exceeded and a new permit applied for early on in the plan period. The WwTW permit currently has headroom for approximately 750 homes before the headroom would be fully utilised. The WQA concludes that there is a technically viable solution to the proposed growth at Ash Vale, but that significant investment will be required by Thames Water at the WwTW as well at other WwTWs upstream to achieve this. Hence, developers should be encouraged to seek confirmation of treatment capacity with TWUL prior to submitting planning applications within the catchment⁵.
- 3.10 The infrastructure schedule includes WWTW capacity upgrade projects in response to these needs (see WCT 2 and WCT9).
- 3.11 Due to the way in which wastewater companies are regulated and plan (through five year Asset Management Plans), it is not possible to identify all of the sewerage infrastructure required over the Local Plan period. Thames Water's approach to wastewater treatment asset management requires that sufficient certainty be given that the quantum of development proposed will come forward during the plan period before improvements to WwTW assets can be justified and funding sought. Thames Water bids for funding through Ofwat to enable such works.
- 3.12 The Local Plan and evidence base (this IDP and the WQA) provides an important step, which will inform Thames Water's preparation of their AMPs and associated business plans, which outline their investment programme. During the plan period, updated future development and phasing or changes to growth allocations will be shared with Thames Water to ensure that plans for WwTW upgrades take into account the most up to date planning position.
- 3.13 Thames Water has also provided site-specific comments on sewerage/waste water infrastructure in relation to the proposed housing sites included in the Submission Local Plan. Those sites identified by Thames Water which may or are likely to require upgrades to wastewater infrastructure for the developments planned, and which remain allocated within the Submission Local Plan (2017) are:

⁴ Reference to permit issued to discharge under the Environmental Permitting Regulations as part of process regulated by the EA. The permit sets out conditions on the maximum volume of treated wastewater that it can discharge and limits on the quality of the treated discharge.

⁵ This should not imply that Thames Water would object to growth, but developers need to ensure Thames Water have sufficient time to make upgrades as necessary to accommodate proposals.

- A5: Jewsons, Walnut Tree Close, Guildford
- A6: North Street Redevelopment, Guildford
- A7: Land and Buildings at Guildford Railway Station, Guildford
- A11: Guildford Park Car Park, Guildford Park Road, Guildford
- A16: Land Between Gill Avenue and Rosalind Franklin Close, Guildford
- A22: Land north of Keens Lane, Guildford
- A24: Slyfield Area Regeneration Project, Guildford
- A25: Gosden Hill Farm, Merrow Lane Guildford
- A26: Blackwell Farm, Hogs Back, Guildford
- A28: Land to the East of White Lane, Ash Green
- A29: Land To The South and East Of Ash and Tongham
- A32: Surrey Police Headquarters, Mount Browne, Sandy Lane, Guildford
- A35: Land at the former Wisley airfield
- A38: Land to the west of West Horsley
- A39: Land near Horsley Railway Station, Ockham Road North
- A40: Land to the north of West Horsley
- A43: Land At Garlick's Arch, Send Marsh/Burnt Common and Ripley
- 3.14 Thames Water has suggested that the existing wastewater network in the area surrounding many of these sites may be unable to support the demand anticipated from the development. In this regard, local upgrades to drainage infrastructure may be required to ensure that sufficient capacity is brought forward ahead of the development. Developers will be required to demonstrate that there is adequate drainage and wastewater treatment capacity to serve the new development and that it would not lead to problems for existing or new users. Where there is a potential wastewater network capacity constraint, the developer should liaise with Thames Water to determine whether a detailed drainage strategy (which the developer may be required to fund) is required this study would inform what infrastructure is needed as well as where, when and how it will be delivered.
- 3.15 If an upgrade to the wastewater infrastructure is required, an 18 month to three-year lead in time may be necessary for the delivery of the infrastructure and potentially longer if the construction of a major treatment works extension or new treatment works is required. Alternatively, the developer may wish to requisition the infrastructure provider to deliver it sooner. Thames Water is also likely to request a Grampian planning condition to ensure that the infrastructure is in place ahead of occupation of the development.
- 3.16 In addition, in relation to larger or strategic sites (including A25, A24, A26, A35, A43) Thames Water have indicated that strategic drainage infrastructure and/or infrastructure upgrades are likely to be required to ensure sufficient treatment capacity to support the demand anticipated from these developments. The Infrastructure Schedule reflects infrastructure projects to address these needs (see Infrastructure Schedule, including at WCT1, WCT3 and WCT4).
- 3.17 The Slyfield Area Regeneration Project is allocated for development in the Submission Local Plan and includes provision for a new sewage treatment works (WCT6). This facility will replace the existing one on site and free up land for residential development. It is also anticipated that upgrades to the existing pumping station and a new pipeline between the existing pumping station and new site will be required. (see Infrastructure Schedule at WCT7 and WCT8).

- 3.18 To avoid unacceptable impacts on the environment, such as sewage flooding of residential and commercial property, it is essential to ensure that wastewater infrastructure is in place. On larger and smaller sites, Thames Water recommends that developers engage with them at the earliest opportunity to establish the development's demand for wastewater infrastructure (both on and offsite). In some circumstances, it may be necessary for developers to carry out appropriate studies to ascertain whether the proposed development will lead to overloading of the wastewater infrastructure.
- 3.19 Where there is an identified capacity constraint and no improvements are programmed by Thames Water, the developer should contact Thames Water to agree what improvements are required and how they will be funded prior to any occupation of the development. Where upgrade work is required on the existing wastewater network, and funding has not been approved by regulator Ofwat, the developer will have the option to requisition the infrastructure.
- 3.20 Thames Water has limited powers under the Water Industry Act 1991 to prevent connection to its network ahead of infrastructure upgrades and therefore heavily relies on the planning system to ensure upgrades are provided ahead of development either through phasing and Local Plan policies or the use of Grampian style conditions attached to planning permissions.
- 3.21 Water companies can only identify whether any additional wastewater infrastructure will be needed to support large-scale development once the scale and location of a proposal has been confirmed.

Summary

3.22 There is currently sufficient wastewater capacity to deal with many smaller developments spread across the borough. Where necessary, any planning permission can be subject to a Grampian planning condition, preventing occupation until any necessary upgrades have been made. However, Thames Water has indicated sites where existing infrastructure capacity may be unable to support the demand anticipated from the development, and upgrades would be required. Strategic-scale developments may also need to be planned into Thames Water's investment plan.

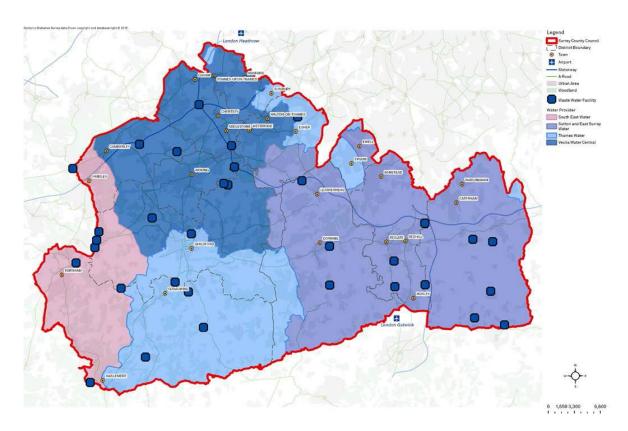


Figure 3.1: Water Companies and Wastewater Treatment Works in Guildford borough

Water supply

Lead agency	 Thames Water - provides water in the southern part of the borough South East Water - provides water in the western quarter of the borough Affinity Water - provides water in the north-east part of the borough Sutton and East Surrey Water - provides water in the eastern part of the borough
Key reports and data	 Water Resources Management Plans produced by Thames Water, Affinity Water, South East Water and Sutton and East Surrey Water. Surrey Infrastructure Study 2016

Context

- 3.23 Utilities and waste infrastructure is provided by private companies which operate on a subregional basis. Delivery of infrastructure is based on planned levels of population growth (natural and a result of development) over areas defined by water companies rather than Local Planning Authorities.
- 3.24 Water abstraction for human consumption takes place at boreholes in Clandon, West Horsley and Albury and at town centre sites (Ladymead, Dapdune and Millmead). Water is abstracted from the River Tillingbourne at Shalford Treatment Plant. The Guildford, Clandon and West Horsley boreholes draw upon the Upper Chalk aquifer. The sources at Albury and Shere abstract groundwater from the Lower Greensand aquifer.
- 3.25 Four companies, Thames Water, Affinity Water, South East Water PLC and Sutton and East Surrey Water, supply water to the borough (see Figure 3.1). Each organisation has produced a Water Resources Management Plan for the twenty-five year period between 2015 and 2040 (a timeframe incorporating the Council's entire Local Plan period). The plans, updated every five years (individually known as asset management plans), seek to accommodate potential increase in demand from new development, manage existing supply of water and take account of likely future changes to the water supply due to climate change.
- 3.26 The Environment Agency has designated the South East of England as an area of serious water stress. This indicates that there is limited rainfall when compared to high population and water demands. Customers in the South East Water coverage area use on average 166 litres of water per head per day (I/h/d); a figure which is likely to be representative of the whole borough.
- 3.27 Given the increasing population and requirement for new housing, the existing water stress experienced in the South East is anticipated to increase. Water companies are planning for this eventuality by utilising various methods including the adoption of water efficiency measures.
- 3.28 Water suppliers are looking to reduce demand for water and the level of wastage through leaked pipes. Both of these measures can have an impact on the ability of the water supply network to

- continue to meet the demands placed on it by a growing population in the South East. Companies are also concerned about and taking greater consideration of the impact of climate change on ground and surface water supplies.
- 3.29 Water companies are adopting a twin track approach to ensuring that a secure water supply is maintained; combining measures to reduce demand (by reducing leakage, enhanced metering and promoting water efficiency) and increasing supply (by making full use of existing resources, upgrading the water distribution network, increasing artificial recharge schemes and investigating opportunities for desalination plants and new reservoirs). During drought conditions, short-term measures will also be used to ensure a continued supply of water.
- 3.30 Ongoing improvements to the water supply will be funded by providers as and when it is necessary. However, any additional water supply infrastructure required to enable a development proposal will be funded by the developer.

Thames Water: Existing provision

3.31 The Thames Water Resources Management Plan highlights an anticipated small deficit in water supply in 2024 in the Guildford Water Resource Zone (WRZ). The deficit is expected to increase from -1 Ml/d (Mega litres per day) in 2024 (in the critical period/peak week) to – 3.8 Ml/d in 2040. The increase in deficit is primarily attributed to a reduction in Deployable Output (a measure of a Water Resource Zone's capability assessed on the basis of the water resources that are available to meet demand to specified levels of service).

Thames Water: Planned provision

- 3.32 Thames Water have identified a programme of demand reduction measures in the medium term (2020-2030) which will be implemented through a combination of progressive metering, water efficiency and leakage control measures. In the longer term, small-scale aquifer storage and a recovery scheme is required in the Guildford WRZ to ensure an adequate water supply is provided. Implementation of the measures will ensure that the Guildford Water Resource Zone stays in surplus during the Water Resource Management Plan period.
- 3.33 Using the areas identified for development within the Local Plan, water companies can consider if there are any issues associated with their existing infrastructure. Even small-scale infill development and redevelopment schemes on previously developed land can have a significant impact on water supply infrastructure. Where necessary, developers will be required to fund impact studies and upgrading of the network. On brownfield sites that already feature water company assets crossing the site, developers may be required to pay for any mains diversions and new off-site infrastructure.
- 3.34 Thames Water has advised that it is often easier to plan for housing development on a small number of large sites rather than many small sites. Larger-scale development may trigger an upgrade of infrastructure. Predicting requirements for smaller developments, which may have a cumulative impact on infrastructure provision, is often more challenging. All water companies require at least a three to five year lead in time for provision of extra capacity. Where a complete new water works is required, the lead in time can be between five to ten years. Large-scale new development may therefore need to be appropriately phased to enable the prior completion of the necessary infrastructure.

- 3.35 It is essential that promoters of strategic developments contact Thames Water as early as possible to discuss their water needs (both on and off site) so that water and drainage strategies can be drawn up as supporting documentation to planning applications. In some circumstances, it may be necessary for developers to carry out appropriate studies in advance of submitting a planning application to ascertain whether the proposed development will lead to overloading of existing water infrastructure. Thames Water is asked for its comments on sizeable planning applications, including adequacy of existing supplies.
- 3.36 Representations from Thames Water provided site-specific comments on water supply infrastructure in relation to the proposed housing sites in their supply area included in the Submission Local Plan. Those sites identified by Thames Water which may or are likely to require upgrades to water infrastructure for the developments planned, and which remain allocated within the Submission Local Plan (2017) are:
 - A1: The Plaza, Portsmouth Road, Guildford
 - A3: Land between Farnham Road and the Mount
 - A5: Jewsons, Walnut Tree Close, Guildford
 - A6: North Street Redevelopment, Guildford
 - A7: Land and Buildings at Guildford Railway Station, Guildford
 - A11: Guildford Car Park, Guildford Park Road, Guildford
 - A13: Kernal Court, Walnut Tree Close, Guildford
 - A15: Land At Guildford Cathedral, Alresford Road, Guildford
 - A16: Land Between Gill Avenue and Rosalind Franklin Close, Guildford
 - A18: Land at Guildford College, Guildford
 - A24: Slyfield Area Regeneration Project, Guildford
 - A25: Gosden Hill Farm, Merrow Lane Guildford
 - A26: Blackwell Farm, Hogs Back, Guildford
 - A32: Surrey Police Headquarters, Mount Browne, Sandy Lane, Guildford
- 3.37 Thames Water indicate that the water network in the area surrounding many of these identified sites may be unable to support the demand anticipated from the scale of development identified within the site allocations. In this regard, local upgrades to water supply infrastructure may be required to ensure sufficient capacity is brought forward ahead of the development. In relation to several of the sites, strategic water supply infrastructure upgrades are likely to be required. Several water supply network capacity upgrades have been identified in the Infrastructure Schedule in relation to strategic sites. (see Infrastructure Schedule at WS1, WS2, WS3 and WS5).
- 3.38 Where there is a potential water capacity constraint, the developer is encouraged to work with Thames Water early on in the planning process to understand what water infrastructure is required, as well as where, when and how is will be delivered. A water supply strategy may be required from the developer to identify the significance of work required to support the development. If an upgrade to the water infrastructure is required, an 18 month to three-year lead in may be necessary for the delivery of the infrastructure and longer if construction of major treatment works extensions or new treatment works are required. Alternatively, the developer may wish to requisition the infrastructure to deliver it sooner. Thames Water generally requires a Grampian planning condition is attached to any planning permission granted to ensure that

appropriate water supply infrastructure is in place ahead of occupation of the development.

3.39 Promoters of the strategic sites will work with Thames Water on the phasing of their developments, to ensure that timely network enhancements take place to support new development.

Affinity Water: existing provision

3.40 Affinity Water anticipates that its central and south east regions will not have sufficient water supply to meet customer needs over their 25-year plan period. Part of our borough falls within Affinity Water's WRZ 6. The Water Resources Management Plan illustrates that there is already a small deficit for average week water supply in the area of our borough that it serves.

Affinity Water: planned provision

3.41 Affinity Water's 'Water Resource Management Plan' states that there will be a 'substantial investment programme' for the central region over the plan period to help ensure demand for water is met. A range of leakage, metering, water efficiency and supply side measures are planned in Water Resource Zone six to ensure that there is an adequate water supply.

South East Water: existing provision

3.42 South East Water provide water supply to the far west of the borough. The area of the borough which South East Water covers is located within WRZs 4 and 5.

South East Water: planned provision

- 3.43 South East Water have previously indicated that the implementation of planned reductions in water demand from a customer metering programme (introduced in 2014/15) and water efficiency measures would enable WRZs 4 and 5 to remain in surplus for average demands during the Council's plan period. However, a deficit is expected from 2020 onwards for peak demands, after which time additional groundwater schemes and regional transfers from neighbouring companies will be required to satisfy demand. Measures to maintain a reliable water supply identified in South East Water's 'Water Resource Management Plan' include demand management through rolling out customer metering, reducing leakage and increasing efficiency, and developing a new groundwater scheme at Boxall Lane (Aldershot) in 2015. Other measures identified include plant improvements to increase abstraction and a regional transfer scheme (in the 2030-2040 period).
- 3.44 South East Water's programme of works is based on a growth forecast of 500 new homes in the borough by 2031. Whilst this figure falls significantly short of the total growth identified across Guildford during the Local Plan period, the company only provide water supply to the far west of the borough.

Sutton and East Surrey Water: existing provision

3.45 The Sutton and East Surrey Water 'Water Resources Management Plan' anticipates there to be a deficit in water supply in its coverage area between 2015 and 2040. However, it is anticipated that the implementation of measures identified in the company's Water Resource Management Plan will ensure that there is sufficient water available.

Sutton and East Surrey Water: planned provision

3.46 Efficiency measures, metering and leakage reduction work will be undertaken in the coverage area to maintain a stable water supply. Capacity will also be improved through the implementation

of supply side measures such as developing a new borehole source.

Summary

- 3.47 The borough is served by a range of water supply companies. Each has identified a range of measures to reduce water consumption and increase supply in the area. However, improvements in infrastructure may be required to enable specific developments to be acceptable in planning terms and will be funded by developers.
- 3.48 The Council will continue to liaise with the water companies regarding the number and location of new developments to feed into future long-term strategies. However, all new development in the borough should reflect the need for water conservation. The promotion and adoption of water efficient practice in new developments will help manage water resources and work towards sustainable development.
- 3.49 The Environment Agency recommends in the Thames River Basin District River Basin Management Plan (2015) that a water efficiency target of 110 litres per head per day should be applied to all new residential buildings. The national minimum standard in Building Regulations is 125 litres per person per day, but planning policies can require compliance with an "optional building regulation" of 110 litres per person per day. Policy D2 of the Submission Local Plan: strategy and sites supports the river basin management plan by implementing the stricter water efficiency target. Conformity with the standard will be assessed through the building control process. To help with reducing water use from new non-residential developments, the Council requires non-residential developments in excess of 1,000 sq. m to achieve at least a BREEAM Very Good standard, which awards credits for water efficiency/ monitoring measures.

Flood risk reduction

River flooding and Surface water flooding

Lead agency	Environment Agency
	Surrey County Council (Lead Local Flood Authority)
	Guildford Borough Council (Flood Risk Authority)
Key reports and	Guildford Borough Council Strategic Flood Risk Assessment
data	Level 1 and 2
	Guildford Surface Water Management Plan and Ash Surface
	Water Management Study

Context

- 3.50 Fluvial (river) flooding from the River Wey and its tributaries is the primary cause of flooding in Guildford. The River Wey Navigation in Guildford borough consists of a combination of navigable rivers and man-made sections maintained by the National Trust. The main tributaries of the River Wey are the Tillingbourne and Cranleigh Water. The River Blackwater flows through the west of the borough and is also a source of fluvial flooding.
- 3.51 More localised types of flooding occur from surface water flooding, groundwater flooding, and flooding from the lead drainage systems and sewers. A large proportion of the borough is currently undeveloped. In such areas, the surface water is unchanged from greenfield rates. The most intensive urbanised areas are within Guildford and Ash and it is here that any further development could potentially increase surface water.
- 3.52 The majority of flooding is limited to open space and rural or semi-rural areas. However, a few developed areas are at high risk from flooding. These most notably include areas of Guildford town centre on both banks of the River Wey, parts of Ash within the Blackwater Valley and some properties in villages along the River Tillingbourne. There are approximately 1,000 properties within the borough that are at a 1% risk of flooding from rivers⁶.
- 3.53 All proposed development must comply with the NPPF and national Planning Practice Guidance. The Council's Strategic Flood Risk Assessment (SFRA) is a material planning consideration and provides technical information on flood risk in the borough. Liaison with the Environment Agency is also always recommended to ensure that the most up to date information on flood risk is used for development proposals. The Environment Agency's flood zone data is updated quarterly.
- 3.54 The Environment Agency identifies three flood risk zones:

Flood Zone 1 - sites within Flood Zone 1 are considered to be at a low risk of fluvial flooding (less than a 1 in 1000 annual probability of flooding by river or sea) (<0.1%).

Flood Zone 2 – areas at a medium probability of flood risk (land having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% - 0.1%) or land having between a 1 in 200 and 1 in

⁶ Source: Risk of Flooding from Rivers and Sea, Environment Agency dataset: https://data.gov.uk/dataset/risk-of-flooding-from-rivers-and-sea1 (2015)

1000 annual probability of sea flooding (0.5% - 0.1%)).

Flood Zone 3 – areas at high risk (1 in 100 or greater annual probability) of flooding (>1%). Very stringent criteria must be met for new developments to be acceptable in this flood risk zone.

3.55 National Planning Policy Guidance differentiates between two areas of flood zone 3:

Flood Zone 3a – land having a 1 in 100 or greater annual probability of river flooding or land having a 1 in 200 or greater annual probability of sea flooding.

Flood Zone 3b – the functional flood plain. This is where water has to flow or be stored in times of flood. Only water compatible uses and essential infrastructure should be considered in the functional flood plain⁷.

- 3.56 Many of the major roads which link Guildford town with other parts of the borough could be blocked during a flood event. This includes the route between Ladymead and Parkway (the A25), Guildford Fire Station and the Royal Surrey County Hospital. The main road between Guildford town and the Royal Surrey County Hospital is prone to flooding from highway drains being overwhelmed.
- 3.57 Notable assets located within flood zone three include Guildford town Police Station and several other prominent riverside sites owned by the Council. The town centre has been subject to various flood events in recent years, most notably in the winter of 2013/2014. Ongoing work to plan flood management infrastructure in the Wey catchment, including appraising new flood alleviation schemes in Guildford town is occurring. Led by the Environment Agency and involving our Major Projects team and several other partners, including Surrey County Council and Thames Water, work is continuing to resolve these flooding issues. Detailed design work for the River Wey flood alleviation scheme in Guildford town centre will be undertaken in Spring 2018. When implemented, the scheme will serve to reduce flooding to these sites.
- 3.58 Surrey County Council is the Lead Local Flood Authority by virtue of recent legislation (The Flood and Water Management Act 2010) and has prepared a draft Local Flood Risk Management Strategy for flood risk management throughout the County (including the borough of Guildford).

Surface water flooding

- 3.59 Pluvial (surface water) flooding is also a common source of flooding in the borough. Surface water flooding happens following intense rainfall when the run-off cannot soak into the ground and local watercourses, ditches, streams and sewers become overwhelmed. Flooding then occurs in low spots, and can be seen following heavy rain in over-flowing ditches. This type of flooding happens very quickly and with little warning because the catchments are much smaller than those for rivers.
- 3.60 A number of places in the borough are vulnerable to surface water flooding. Accordingly, the Council has produced a Guildford Surface Water Management Plan and Ash Surface Water Study. Based on the results of hydrological modelling, these documents identify 'hotspot' areas

⁷ Flood Zone 3b is also divided into a developed and undeveloped flood zone 3b through Guildford urban area. The Level 1 SFRA explains this further.

considered to be at high risk of surface water flooding. Hotspot areas are located around Guildford in the River Wey catchment area and within and around Ash in the Tillingbourne catchment area. (see Figure 3.2).

3.61 Approximately 720 properties in the borough's hotspot areas are at risk of flooding⁸. Local flood events have occurred in the recent past; the failure of a Thames Water pumping plant to remove a build-up of rainwater causing Avondale (Ash) to flood in the winter of 2014/5.

Existing provision

3.62 Whilst Guildford does not contain any formal flood defences, isolated flood relief facilities, including flood relief channels and culverts, are located within the borough.

Planned provision

- 3.63 Climate change is expected to cause an increase in peak river flows over the next 50 to 100 years, and this may result in some areas being at greater risk of flooding in the future. The Strategic Flood Risk Assessment (SFRA) has identified this as an issue for a number of small areas of Guildford town centre.
- 3.64 Guildford Borough Council has worked with its partners, Surrey County Council, the Environment Agency, Thames Water and Network Rail to produce a Surface Water Management Plan for the borough. The Surface Water Management Plan consists of two documents: the 'Guildford Surface Water Management Plan' and 'Ash Surface Water Study'. The documents identify measures that all partners can take to reduce the risk of surface water flooding. These range from better-targeted maintenance to proposals for capital projects for flood protection schemes.
- 3.65 Developers of the strategic sites identified within the Submission Local Plan and other sites in the borough (as considered necessary) will be required to fund suitable measures to minimise surface water run-off produced from their development proposals. Measures should incorporate Sustainable Drainage Systems (SuDS) unless they can be demonstrated to be inappropriate. These infrastructure projects are identified in the Infrastructure Schedule (see FRR1, FRR2 and FRR3).
- 3.66 Guildford Borough Council is also undertaking other work to reduce flood risk in the borough. A major project involving the construction of an earth bund has been granted funding to protect properties in Ash Green from flooding. There is also a major study underway investigating the causes of flooding in Pirbright, whilst funding has also been received from the Environment Agency for the Ash Surface Water Scheme (detailed study and recommendations for further work), Ashenden Road Surface Water Scheme (detailed study, surveys and remedial works as necessary) and the Flexford flood relief scheme. Defra funding was also previously secured through the Environment Agency to conduct building surveys along Walnut Tree Close, Guildford, to assess what property level protection measures could be installed to protect properties from future flood events.
- 3.67 The Council is working towards starting other similar projects. It also has a rolling programme of maintenance for over 42km of strategic watercourse, including over 90 grilles (or trash screens) to protect pipes and culverts from blocking with logs and other floating debris.

⁸ Guildford Surface Water Management Plan (2015): http://www.guildford.gov.uk/surfacewatermanagementplan

Surface Water Flooding Hotspot Locations Map Key Flooding hotspots
Guildford borough boundary Print Date: October 2015 GUILDFORD B O R O U G H

Figure 3.2: Map of Surface Water Flooding hotspot locations

Guildford borough minastructure Denvery Frant. December 2017

Electricity and gas supply

- 3.68 Two of the major long-term challenges in UK energy policy are tackling climate change by reducing carbon dioxide emissions and delivering secure, clean energy at affordable prices, as there is increasing dependency on imported energy. Concerns over climate change and rising fuel costs may well affect demand for, and supply of, energy.
- 3.69 Energy demand may also be affected by price increases, improved insulation standards and other efficiency measures. Supply may change to more sustainable sources, including renewable fuels, exploitation of wind and wave power, and combined heat and power linked to district heating. There is also an expectation that microgeneration will play an increasing role in energy production and supply.

Electricity

Lead agency	UK Power Networks
Key reports and data	UK Power Network Regional Development Plan 2015National Grid online sources
	EDF Energy and Scottish and Southern Energy are the main
	electricity supplier to the borough

Context

- 3.70 There are four main elements to the UK's electricity industry. The role of each element is outlined below:
 - Generators produce electricity from coal, gas, oil, nuclear power plants, hydroelectric plants and wind farms. Electricity cannot be stored efficiently so is generated as needed.
 - 2) The national transmission network maintains the flow of generated electricity through to the regional distribution networks. It is owned by National Grid plc.
 - Distributors own and operate the distribution network of towers and cables that bring electricity from the National Grid's national transmission network to homes and businesses.
 - 4) Suppliers supply and sell electricity to consumers. They use the transmission and distribution networks to pass the electricity to homes and businesses.
- 3.71 UK Power Networks is the electricity distribution network operator (DNO) for south east England, including most of the borough of Guildford. Scottish and Southern Energy also distribute to parts of the borough. The companies take electricity at high voltages from the National Grid and transform it to voltages suitable for domestic and commercial use. The most important function of a DNO is to ensure that all reasonable steps are taken to maintain the supply of electricity to customers.

3.72 Applications for the construction of overhead lines above 132kV are generally considered nationally significant infrastructure projects and dealt with using that process. Other applications for overhead lines are determined under the provisions of the Electricity Act 1989 as amended. Before development consent is granted, applications will be submitted to the relevant local planning authority for review. If the local planning authority objects to a proposal, this would usually lead to a public inquiry by an independent inspector, with the Secretary of State for Energy and Climate Change making a final decision after considering the inspector's report. As part of the decision-taking process, the views of the local planning authority, local people, statutory bodies and other interested parties can be taken into account.

Existing provision

- 3.73 The local network within the borough of Guildford consists of an Electricity Grid (33kv) and five primary substations: Guildford, Guildford 'A', Guildford 'B', Merrow and Shalford. The 33(KV) Electricity Grid, along with various other grids outside of the borough, is itself supplied by the West Weybridge 400/275/132kV Grid Supply Point. The 132kV AIS is currently being replaced with GIS at West Weybridge Grid and is fed via 2x240MVA, 2x180MVA and 2x120MVA 400/132kV super grid transformers (SGT's).
- 3.74 The 132/33kV Grid substation firm capacity is 110 MW. Total group demand is currently 88MW but anticipated to rise to 93MW by 2023; leaving a capacity headroom of 17MW.
- 3.75 New connection activity, including the connection of 5.8MW, was undertaken in the local network between 2010 and 2014. The network has also been designed to connect approximately 12MW of accepted new distributed generation from local customers in the borough including the Royal County Hospital, University Campus and Thames Water.

Planned Provision

- 3.76 UK Power Networks' planning period runs between 2015 and 2023. In June 2015, the company published its Regional Development Plan. Whilst there are not currently any works in construction or at feasibility stage in Guildford, the document identifies future major works, including reinforcement to the Guildford Grid. Various reinforcement and asset replacement projects are planned in Guildford up to 2023, including two asset replacement projects involving primary transformers and projects to correct faults. The likely cost of asset replacement and reinforcements is expected to total approximately £30 million over the plan period as indicated in the Infrastructure Schedule at EG1.
- 3.77 UK Power Network sees its asset replacement programmes as providing opportunities to rethink the way in which its infrastructure is developed to meet future customer needs, particularly for connections to green and renewable energy sources. Asset replacement works identified in the borough before 2023 include:
 - Replacing four transformers supplying Guildford
 - Replacing 11kv switchgear Guildford 'B' primary substation
 - Replacing 33Kv switchgear Guildford Grid
 - Replacing 13Kv cable sections in the circuits from West Weybridge (in progress).

- 3.78 A load growth forecast is used to predict needs for future upgrades with 1,00MWA the trigger point for needing reinforcements. Future load demand and network growth in the wider Regional Development Plan area is likely to be heavily influenced by planned housing development up to 2027 and future development at Gatwick. The additional housing is likely to require approximately 150MW electricity supply demand over this period.
- 3.79 UKPN consider there to be sufficient grid supply capacity to cater for the anticipated additional demand generated in the wider regional development plan area. This forecast is based on a scenario whereby 3,200 new homes are built in the borough by 2022; growth which will generate 10 MW aggregate load demand. UKPN anticipate the additional demand in the borough to be supplied predominately from the Guildford Grid.
- 3.80 Whilst the existing Guildford Grid is considered to be firm, UKPN have stated that it may be necessary to reinforce the site by 2023. This will be achieved by installing a new (third) transformer and a new 132kv cable circuit fed from the Leatherhead Grid. This reinforcement and other infrastructure projects are incorporated in the Infrastructure Schedule at EG2.
- 3.81 Improvements and additions to electricity infrastructure will be provided by utilities companies as required. Accordingly, there is not expected to be a funding gap for future electricity infrastructure provision in the borough. The costs of providing a connection will be shared between the new customer (who pays for immediate connection requirements and a proportion of any wider network reinforcement required) and all other customers. However, the Department of Energy and Climate Change has proposed to introduce an amendment to the Electricity Regulations 2002, which will allow developers who have paid for initial reinforcement costs to recover costs from subsequent connections for a period of ten years rather than the current five year period.
- 3.82 In making a decision on whether to invest in new grid capacity, DNO's must strike a balance between helping customers to connect and keeping bills down for all.
- 3.83 Scottish and Southern Energy state that their network capacity in Surrey is adequate for meeting existing and forecast customer demand. However, as in the case of UK Power Networks, the organisation have a forward programme of asset replacement which responds to the need for replacement of ageing assets around their area.
- 3.84 The companies responsible for energy supplies are normally able to provide the required infrastructure to serve new development through exercising their statutory powers and by agreement with the relevant parties.
- 3.85 Upgrades to the electricity supply infrastructure at the strategic sites will be sought should capacity assessments conclude it necessary and will be charged at the developer's expense. (see Infrastructure Schedule at EG3, EG4, EG5 and EG7). A WSP survey for the former Wisley Airfield has indicated an assumption that UKPN infrastructure on site will be diverted or replaced as part of the development.

Gas

Lead agency	Scotia Gas Network/Southern Gas
Key reports and data	 Information from Scotia Gas Network/Southern Gas Surrey Infrastructure Study 2016

Context

- 3.86 Britain's gas transmission network transports gas from entry terminals to gas distribution networks, or directly to power stations and other large industrial users. The gas transmission network is owned and operated by National Grid plc.
- 3.87 Eight gas distribution networks operate across Great Britain, each covering a different geographical region. Scotia Gas Networks owns and manages the Scotland and Southern England (Southern Gas Network) areas.

Existing provision

3.88 The gas industry has moved on substantially since privatisation to enable competition. As such, there are now many variables in determining future needs. Southern Gas Network (SGN) has a duty to extend or improve the national transmission system in its area where necessary to ensure that an adequate and effective network for the transportation of gas is in place. The borough of Guildford has an extensive supply of gas coverage and the gas demands of the area are regularly assessed to balance supply with demand. There are, however, some rural areas in the borough including Ockham and Wisley where mains gas is not available.

Planned provision

- 3.89 It is expected that there will be a small decrease in annual and peak day gas demands between 2014 and 2024 due to increasing efficiencies and renewable incentives. Currently there are no anticipated issues with gas supply general load growth in the Guildford area, although specific development may require reinforcement. These requirements will be treated on an individual basis. Reinforcement projects are planned for at the planning application stage, when it is clear how new loads will need connect to the network, rather than planned for in advance. The connection costs are generally covered by the distributer unless the site and additional load is significant, in which case developers are required to provide a significant contribution.
- 3.90 Southern Gas Networks funding is agreed via a regulatory review with Ofgem on a five or eight yearly cycle. The current review covers the period 2013-2021. As funding for infrastructure projects is regulated by Ofgem, such projects will not draw funding from the Community Infrastructure Levy. Infrastructure funding will instead remain based around the economic test criteria, whereby the developer contributes to infrastructure delivery costs deemed uneconomic by SGN testing procedure. Major new development will be subject to the economic test to determine if a financial contribution is required from a developer towards the enhancement or provision of additional gas infrastructure. A WSP survey for the

- former Wisley Airfield has indicated that Pressure Reduction Station is likely to be required on site to support the development.
- 3.91 The companies responsible for energy supplies are normally able to provide the required infrastructure to serve new development through exercising their statutory powers and by agreement with the relevant parties. Agreements need to be reached with developers prior to investment in new infrastructure being made.

Telecommunications

Lead agency	 BT commercial network Virgin Media commercial network Mobile phone operators - Three, O2, EE and Vodafone Surrey County Council (Surrey Superfast Broadband project)
Key reports and data	Information from Superfast Surrey

Context

3.92 Telecommunications infrastructure includes the mobile phone network and broadband.

Mobile Phone Network

- 3.93 The Mobile Operators Association publish rollout plans every year identifying existing and proposed base stations in the area on behalf of the four main mobile phone operators in the UK (Three, O2, EE and Vodafone).
- 3.94 Ofcom data suggests that only 0.25% of premises in Surrey do not have a reliable 2G signal from any mobile operator, 0.05% of premises in the county do not have a reliable 3G signal from any operator and 0.53% of premises do not have a reliable 4G signal.

Broadband

- 3.95 The majority of households in our borough are covered by the broadband network, albeit at varying speeds.
- 3.96 Surrey County Council (SCC) is committed to ensuring that all homes and businesses in Surrey can access efficient broadband speeds. Access to an efficient broadband connection is crucial for businesses and supporting Surrey's future economy. It also has the potential to change the way residents, businesses and the public sector go about day-to-day activities.
- 3.97 An effective broadband service will stimulate economic growth by providing support for new business start-ups and promoting competitiveness. It also has the potential to enable digital inclusion of vulnerable communities and improve access to education facilities (thus improving the skills base). Some of the borough's rural areas remain without a reliable broadband connection, an infrastructure gap which has discouraged the growth of the rural economy and contributed to increasing economic and social inequalities. Stimulating the rural economy is a key aim of both the Council's Corporate Plan (2015-2020) and Submission Local Plan. The Council will therefore actively support the rollout of broadband in the borough's rural areas.
- 3.98 A survey by Surrey County Council has demonstrated that existing broadband networks in the county, particularly in the more rural areas, are not sufficient to meet the needs of home and business users. Nearly all respondents indicated that it is important for everyone in Surrey to have access to good broadband speeds, whilst 98% per cent of businesses stated that their operations would be benefited by the provision of superfast broadband. Over 50

- per cent of both business and residential respondents stated said that their current broadband service is unreliable (an issue considered to be of equal importance to speed of connection).
- 3.99 The provision of a reliable broadband network also supports efforts to reduce carbon emissions and promote sustainable development by reducing pressure on other infrastructure such as the local transport network.
- 3.100 Surrey County Council will continue to work with Guildford Borough Council, as well as community and business networks in the borough, to support the take-up of superfast broadband services and ensure that potential benefits are realised.

Existing provision

- 3.101 Both Virgin Media and BT Openreach already have a fibre-based network operating in Guildford, which supports superfast broadband services. The BT postcodes with limited coverage in our borough are primarily concentrated in rural areas in the west of the borough.
- 3.102BT Openreach has previously undertaken upgrades to its network in the Surrey area. However, this work did not include 33,210 premises throughout Surrey and another 63,113 premises where only partial upgrade was completed. In our borough, these upgrades only covered the Guildford and Worplesdon exchange area.
- 3.103Areas that were not covered by BT Openreach or Virgin Media formed part of Surrey County Council's intervention area. In 2012 Surrey County Council signed a contract with BT to deliver Next Generation Access fibre broadband infrastructure to over 84,000 homes and businesses throughout the county that were excluded from commercial broadband rollout plans. The contract required Openreach, acting as BT's delivery agent, to deploy fibre broadband coverage to 98.6% of the premises within the identified Intervention Area. Of those premises covered, 93.9% had to achieve a minimum download speed of 15Mbps. The deployment rollout was divided into a series of quarterly milestones.
- 3.104All deployment in the main phase of the Surrey Superfast Surrey Broadband programme has been completed with more than 86,000 premises now covered by the fibre broadband network.
- 3.105 Despite the progress made, approximately 20,000 premises in Surrey will still be unable to obtain NGA download speed of 15Mbps or more. These include properties that are either not connected to NGA infrastructure or are on long telephone lines and unable to access download speeds of 15mbps.
- 3.106The take-up of fibre broadband services within the intervention area is approaching 36%.

 This take-up level is amongst the highest in the country and will trigger clawback funding that can be used for further broadband deployment.

Planned provision

3.107In December 2015, Superfast Surrey announced a subsidised basic broadband scheme funded and managed by BDUK. The scheme forms part of a Government commitment to

- give access to download speeds of at least 2Mbps to every premises and provides the option of a subsidised basic broadband installation for eligible premises.
- 3.108 The Superfast Surrey Programme, combined with the commercial rollouts, is now enabling approximately 96% of all Surrey residents to access fibre download speeds of 15mbs or above. This is anticipated to increase to 97% by 2018 due to additional commercial deployment plans. BT have now identified nearly 6,000 additional premises that will benefit from fibre broadband download speeds of 24mbps or more as part of the fibre broadband deployment to be completed in early 2019.
- 3.109The Local Plan Development Management Policies document will need to address the siting and design considerations for telecommunications development. Developers may be able to assist with enabling future rollout of fibre to the home by including spare ducting to the highway for broadband connection when laying services to new development. Developers will be expected to fund connection costs from all future development to the existing broadband network.
- 3.110 Unified Communities over Regional Networks (Unicorn) is a large-scale piece of IT infrastructure that has the capability to link partners' ICT systems (for use by public services broadly within Surrey and Berkshire). Its estimated project value is £170million. Following the awarding of the contract to Unicorn in September 2012, the initial partners, which included Surrey County Council and the 11 district and borough Councils in the county, were connected to the system in April 2013. Unicorn is a valuable tool for public sector organisations service delivery because it offers the potential for sharing information about asset management security, sharing assets and using a common way of marking assets. It is expected that public health service providers, schools, further and higher education, third sector, parishes and others will become active partners. The recently extended contract for Unicorn runs to 2021.

Summary

- 3.111 There are rural areas in the borough that suffer from a lack of consistently fast broadband, and have not received superfast broadband from commercial infrastructure providers. These areas notably include Send, Ripley, East and West Horsley, West Clandon, Gomshall, Shere, Bramley, Normandy, Flexford and Seale, all of which now fall into the intervention area for Surrey County Council's Superfast Surrey Broadband project.
- 3.112 Surrey County Council has implemented the Surrey Superfast Broadband programme to increase access to the fibre broadband network across the county. Guildford Borough Council will continue to work with Surrey County Council and community and business networks in the borough to support the further uptake of broadband services.

Waste and recycling

Council
GBC website nent Strategy 2015

Context

- 3.113Surrey County Council is responsible for waste management in the county and acts as the waste disposal authority. Guildford Borough Council is responsible for the collection of household waste and is known as the waste collection authority.
- 3.114The Surrey Waste Plan (2008) is the key planning document for waste management in the county. The plan sets out the countywide policy for meeting the waste needs of Surrey. The overarching aims of the Surrey Waste Plan are to reduce the level of waste being produced and to ensure that a high percentage of waste is reused or recycled (SCC's revised joint municipal waste management strategy 2015 includes a target to recycle and recover 70% of household waste by 2019/20). Where this is not possible, the Surrey Waste Plan aims to ensure that there is sufficient infrastructure to process the county's waste effectively.
- 3.115The evidence that informed the production of the Waste Plan shows that whilst the amount of waste created per household is expected to decrease by 2020, the overall amount of waste produced in Surrey will increase due to the level of housing growth planned in the county. To ensure that this additional waste is appropriately managed, further waste management facilities are required in the county.
- 3.116Increases in recycling rates will also generate a requirement for more recycling facilities within the county. Within our borough, there has been a drive to improve recycling rates and reduce the amount of household waste created. The Council's Corporate Plan 2015-2020 identifies 'achieving less waste, more re-use and recycling' as a key environmental priority. The 'Recycling More Initiative' has recently been introduced by the Council and helped the borough achieve a recycling rate of 59%.

Existing provision

- 3.117The borough currently contains one Community Recycling Centre at the Slyfield civic amenity tip. The facility is open for residents to dispose of household, garden or hazardous waste. A waste transfer station (WTS) is also present on site and accepts commercial and chargeable industrial waste which is chargeable. The WTS also functions as a drop-off point for some district collections of residual household waste and recyclable materials prior to bulking and onward transfer for management elsewhere.
- 3.118Whilst the Guildford WTS can currently manage 180,000 tonnes per annum of waste, the Ash Vale WTS is partly operating as an overflow facility to relieve the pressure experienced at Guildford.

- 3.119There are currently over 30 public local collection / recycling sites located within the borough. These provide a collection point for a wide range of materials. Charitable organisations, including Furniture Link Guildford (a member of Surrey Reuse network), also work to reduce the amount of landfill produced.
- 3.120The Council's waste collection scheme uses an individual wheeled bin for both refuse and comingled recycling and a food waste bin. The wheeled bins are collected alternate weekly and the food waste collected on a weekly basis. Textiles, batteries and Waste Electrical and Electronic Waste (WEEE) continue to be collected on an alternate weekly basis. The Council operates a Garden Waste Collection Scheme whereby households who do not want to compost and are unable to visit the local Community Recycling Centre can register (paying a small annual fee) to have their waste collected from the kerbside.

Planned provision

- 3.121 Additional housing in the borough will create extra waste that will need to be collected, disposed of, and managed. However, the housing growth planned across Surrey has been considered as part of the preparation of the Surrey Waste Plan and will form a key consideration within the ongoing review of the document currently being undertaken by Surrey County Council. Accordingly, waste treatment capacity is being increased and new development will be required to provide additional recycling bins for new households.
- 3.122The Slyfield Regeneration Area allocated in the Submission Local Plan contains provision for a new (replacement) waste management facility on site. The development will involve the replacement of the existing Community Recycling Centre (CRC) with a larger, more modern facility incorporating additional recycling tanks and parking, a new Surrey County Council waste transfer station and new works depot for Guildford Borough Council (see the Infrastructure Schedule at SARP1, 2 and 3).
- 3.123 Part of the site identified for development in the Submission Local Plan at the former Wisley Airfield is also allocated under the Surrey Waste Plan (2008) for waste use (including waste management and aggregates recycling facility). Surrey County Council is currently in the process of reviewing the Surrey Waste Plan and carried out an 'Issues and Options' consultation and a 'Call for Sites' in 2016. We understand that this site is no longer available for waste uses and Surrey County Council has confirmed that there is currently no justification or intention to compulsory purchase the site for waste uses. Furthermore, this site has been excluded as a proposed site for the delivery of waste management infrastructure as part of the Draft Surrey Waste Local Plan, which is intended to replace the Surrey Waste Plan. We therefore do not expect this site to be safeguarded in the new Waste Plan.

Summary

3.124The market is expected to bring forward individual waste facilities in accordance with the Surrey Waste Plan in a timely way to meet the known or predicted pattern of need in the borough. The Council will continue to work closely with Surrey County Council on waste issues and promote behavioural change. We anticipate that with increasing recycling rates, waste collection, recycling and disposal needs can be met.

4. Green infrastructure

Lead agency	GBC Parks ServiceGBC Planning ServiceNatural England
Key reports and data	JSBP Delivery Framework 2009Guildford TBH SPA Avoidance Strategy 2017 SPD

Open space

- 4.1 The NPPF defines Open Space as "all open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity" (NPPF glossary).
- 4.2 Open spaces of all types and sizes are important because they provide opportunities for relaxation, social interaction, sport and recreation, which in turn contribute to mental and physical wellbeing. They can be important for wildlife, help maintain water and air quality and reduce flood risk. Green spaces in urban areas soften and frame the built form and provide attractive relief from the urban intensity of our towns.
- 4.3 The Submission Local Plan: strategy and sites identifies Open Space on the policies map and provides protection for these spaces from development.

Existing provision – see Open Space Sport and Recreation Assessment 2017

4.4 The NPPF states:

"Access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities. Planning policies should be based on robust and up-to-date assessments of the needs for open space, sports and recreation facilities and opportunities for new provision. The assessments should identify specific needs and quantitative or qualitative deficits or surpluses of open space, sports and recreational facilities in the local area." (paragraph 73).

4.5 The Local Plan is supported by the Open Space Sport and Recreation Assessment 2017, which meets the requirements set out in paragraph 73 of the NPPF by establishing minimum standards for different types of open space in our borough and then assessing whether the minimum standards have been met. The new standards will be adopted through a future Development Management policy, but the assessment is already informing planning decisions as it enables decision makers to understand which types of open space are in deficit and in which areas across the borough.

Planned provision

4.6 The development of new housing in the Borough will place pressure on the provision of open

- space. This will be met through the enhancement of existing provision, relocation / redesignation and / or new provision of open space across a variety of typologies including allotments, amenity green space and park and recreation grounds (see Open Space Assessment typologies).
- 4.7 New / enhanced open space provision (in some form) will be required where there is a new development and a planned increase in population, and/or an existing deficiency in supply or access to facilities exists. In this regard, new open space (not associated with education provision) will be required in relation to strategic sites including Gosden Hill, Blackwell Farm and the former Wisley Airfield site (see Infrastructure Schedule at OS1, OS2 and OS3 respectively). Apart from the provision of open space on site, contributions toward open space provision will be sought toward improvements in the area where necessary.
- 4.8 Further open space relocation / provision reflected in the Submission Local Plan includes the relocation of the Bellfields allotments as part of the redevelopment of the SARP site and provision of community allotments at land north-east of Spoil Lane linked to permission for a large residential development of 400 homes in the area (see Infrastructure Schedule at OS5 and OS6 respectively).

Suitable Alternative Natural Greenspace (SANG)

4.9 The purpose of this section is to demonstrate that the Suitable Alternative Natural Greenspace (SANG) sites identified in the Submission Local Plan Strategy and Sites are adequate to deliver the housing sites proposed in the plan.

Thames Basin Heaths Special Protection Area

- 4.10 The Thames Basin Heaths (TBH) cover an extensive are of the South East region. This area is a designated Special Protection Area (SPA) and is protected under UK and European law because it provides an important habitat for three species of rare birds: Dartford warbler, woodlark and nightjar. Evidence shows that new residential development within five kilometres of the SPA, and significantly large residential development within five to seven kilometres of the SPA, will have a significant adverse effect on the SPA through increased recreational pressure.
- 4.11 Natural England has agreed a three pronged approach to overcome the adverse effects on the SPA which arise mainly from the recreational use of the SPA by local people. This approach is set out in Guildford borough's <u>Thames Basin Heaths SPA Avoidance Strategy</u> <u>2017</u> (the strategy) which follows the recommendations in the Thames Basin Heaths Special Protection Area Delivery Framework 2009 (the framework).

4.12 The three prongs are:

- the provision of SANGs to attract people away from the SPA
- monitoring of the SPA and access management measures to reduce the impact of people who visit the SPA and
- habitat management on the SPA to improve the habitat for the ground nesting birds.

- 4.13 The third prong is delivered by Natural England and falls outside the development management system. The second prong is achieved through the Strategic Access Management and Monitoring (SAMM) project, which is delivered by the TBH SPA Joint Strategic Partnership Board. The Council collects funding from developers for this purpose.
- 4.14 Net new residential development is prohibited within 400 metres of the SPA as it is not considered possible to avoid an impact on the SPA through the measures listed above.

SANGs

- 4.15 SANGs are semi-natural, attractive green spaces that function as an alternative to the SPA for recreation. They allow new residential developments to be built whilst avoiding an increase in recreational pressure on the SPA by 'soaking up' potential SPA visitors. Where the Council grants permission for new residential developments within five kilometres of the SPA (and for significantly large residential developments within five to seven kilometres of the SPA), it has responsibility for ensuring that adequate SANG land is secured or provided, whether by the Council or other parties.
- 4.16 Very large developments will often provide their own SANG (referred to here as bespoke SANGs). However, this is not viable for most developments so the Council provides SANGs that developers can pay a tariff to use (referred to here as strategic SANGs). Under the terms of the approach, SANGs have a catchment area depending on their size as follows:
 - under 12 hectares two kilometre catchment
 - 12 to 20 hectares four kilometre catchment
 - 20 hectares or over five kilometre catchment
 - any SANG without a parking area has a catchment of 400 metres.
- 4.17 These catchments are based on the distances that people travel to use the SPA. Developments must be located within the catchment of the SANG they use, except developments of fewer than 10 dwellings which can use any SANG regardless of location.
- 4.18 Eight hectares of SANG provides avoidance for 1000 people. Current occupancy rates (based on data from the 2011 national census) indicate that one hectare of SANG will provide avoidance for around 50 homes, assuming the average home has three bedrooms. However, Policy H1 of the Submission Local Plan: strategy and sites calls for a mix of homes to meet needs identified in the latest Strategic Housing Market Assessment (SHMA). The West Surrey SHMA (the most recent) identifies a need to build smaller homes than the current housing stock profile. Therefore, it is reasonable to expect that the occupancy rate may come down in future as dwellings will on average have fewer bedrooms, and SANG land may be able to provide avoidance for more homes.
- 4.19 As future occupancy rates are difficult to predict and quantify, the calculations below use the assumption of 2.4 occupants per dwelling recommended in the framework. This figure also indicates a dwelling size slightly smaller than three bedrooms, which ties in with policy H1. An occupancy of 2.4 means that one hectare of SANG land can provide avoidance for around 52 homes. It should be noted that the amount of SANG capacity allocated to

dwellings when they get planning permission is based on the number of bedrooms in the dwellings and the expected occupancy, not an assumption that 2.4 people will live in each house.

Submission Local Plan: strategy and sites SANG strategy

Existing strategic SANGs

- 4.20 Guildford borough has the following operational strategic SANGs:
 - Effingham Common
 - Chantry Woods
 - Riverside Nature Reserve (including Parsonage Watermeadows)
 - Lakeside Park
- 4.21 Effingham Common (see Infrastructure Schedule at SANG1) does not have a parking area so it has a catchment limited to 400 metres. The Council is currently considering options for delivering a parking area. However, the following SANG allocation scenario does not rely upon the delivery of a parking area at Effingham Common as an alternative SANG has now been granted permission (Long Reach SANG).
- 4.22 Chantry Woods (see Infrastructure Schedule at SANG2) is a large SANG to the south of Guildford town that provides avoidance for Guildford town and its surroundings. Riverside Nature Reserve (see Infrastructure Schedule at SANG3) is an area of land in north Guildford adjacent to the river Wey and includes the land at Parsonage Watermeadows. It provides avoidance for Guildford town and some surrounding settlements.
- 4.23 Lakeside Park is now fully allocated and cannot provide any avoidance for future developments.

Proposed strategic SANGs

- 4.24 The Submission Local Plan Strategy and Sites identifies the following new strategic SANGs.
 - Tyting Farm (see Infrastructure Schedule at SANG4)
 - Burpham Court Farm (see Infrastructure Schedule at SANG5)
 - Ash Lodge Drive (see Infrastructure Schedule at SANG7)
 - Long Reach (see Infrastructure Schedule at SANG8)
 - Russell Place Farm (see Infrastructure Schedule at SANG6)
- 4.25 Tyting Farm is an area of land to the south of Guildford town that is owned by Guildford Borough Council. It would provide avoidance for Guildford Town Centre and Guildford urban area, along with the existing SANG at Chantry Woods. Natural England have agreed that Tyting Farm can be used as a SANG in principle. The Council is currently working on a SANG layout and management plan. The exact amount of capacity it will provide is not yet known, but is likely to be around 42 hectares. Tyting Farm is identified as a potential SANG in the strategy.
- 4.26 Burpham Court Farm is owned by Guildford Borough Council. Natural England have agreed

that Burpham Court Farm can be used as a SANG in principle and the Council is currently working on a SANG layout and management plan. The total amount of SANG it will provide is not yet known but this scenario makes an assumption that 20 hectares of SANG will be made available and that it will be used by the Slyfield Area Regeneration Project (SARP), as this has been the position historically. Natural England have agreed that the SARP development can use other SANGs with catchments that cover it, including Tyting Farm and Chantry Woods. There is a significant amount of spare capacity in these SANGs so if the amount of SANG delivered at Burpham Court Farm is lower, SARP can still be delivered.

- 4.27 Ash Lodge Drive SANG is a 24 hectare SANG provided by the developer of a nearby residential development site in Ash. This SANG and the development have planning permission (planning application 12/P/01973). The development site falls within the boundary of Land Availability Assessment (LAA) site 2247. Eight hectares of this SANG have been set aside to provide bespoke avoidance for 400 homes included in this permission. The owner of the SANG has agreed that the remaining 16 hectares are available for other developments. The SANG is currently being delivered and the Council is working with the developer to agree the mechanism for allocating the strategic SANG capacity to other developments.
- 4.28 Long Reach SANG has been brought forward by the owner of the land and has been granted planning permission (16/P/01459 and APP/Y3615/W/16/3165858). Natural England have agreed that the site can be used as a SANG. A small part of the SANG will be used for the landowners own development and the landowner has agreed that remaining capacity will be available as avoidance for other developments.
- 4.29 Russell Place Farm has been brought forward by the owner of the land and has been granted planning permission (16/P/02134 and APP/Y3615/W/17/3179179). Natural England have agreed that the site can be used as a SANG. The site is not linked to a specific development and the landowner has agreed that the capacity will be available as avoidance for developments within the borough.

Proposed bespoke SANGs

- 4.30 We expect the developers of the following sites to deliver bespoke SANGs to provide avoidance for their own developments. These developers are working with Natural England to produce suitable SANG proposals.
 - Former Wisley Airfield (LAA site 53) (see Infrastructure Schedule at SANG12)
 - Gosden Hill Farm (LAA site 45) (see Infrastructure Schedule at SANG11)
 - Blackwell Farm (LAA site 311) (see Infrastructure Schedule at SANG10)
 - Land at Manor Farm East Lane, West Horsley (LAA site 15) (see Infrastructure at SANG9 / Bens Wood)

Site proposals

4.31 The following tables and maps set out a scenario that shows how the development sites in the LAA could be allocated to the existing and proposed SANGs. The lists of sites show all the residential sites listed in the LAA, including traveller sites and developments of student and care home bed spaces.

- 4.32 There are 10 sites in and around Ash and Tongham that have received planning permission with a Grampian condition which stipulates that work must not start until adequate SANG avoidance has been secured. This has happened because there is currently no available SANG capacity in the west of the borough. Eight of these sites form part of site 2247 (A29) which is included on the lists within the SANG allocation scenario shown below. The remaining two sites have been included on the lists separately.
- 4.33 The lists do not include any sites that have been granted planning permission without a Grampian condition or have been completed as these sites have already had SANG capacity allocated and that capacity has been deducted from the figures for available SANG capacity.
- 4.34 The first table sets out the amount of development proposed for allocation to each SANG.
- 4.35 "Total capacity" shows the total size of the SANG, including capacity that has already been allocated to existing developments.
- 4.36 "Available capacity" shows the total capacity of the SANG minus capacity already allocated.
- 4.37 "Homes allocated" shows the number of proposed homes allocated to each SANG in this scenario.
- 4.38 "Capacity used" shows how much capacity within each SANG is used in this scenario.
- 4.39 "Remaining capacity" shows how much capacity within each SANG remains after this scenario.
- 4.40 The spatial distribution of sites, SANGs and SANG catchments can be seen in the maps at the end of this section.
- 4.41 Figures in the tables may not sum due to rounding.
- 4.42 The available capacity column excludes SANG capacity that has been allocated to a site that has obtained planning permission but has still not secured the SANG by paying the sum agreed in the s106 agreement. In these cases, it is possible that the site will not get built, the permission will expire and the SANG capacity will become available once again.

Figure 4.1 Amount of development allocated to each SANG (as at November 2017)

Strategic SANG	Total capacity (ha)	Available capacity (ha)	Homes allocated	Capacity used (ha)	Remaining capacity (ha)
Effingham	34	29.3	0	0	29.3
Chantry Woods/Tyting Farm	80	61.5	2234	43	18.5
Riverside/Parsonage	24	4.5	89	1.7	2.8

Burpham Court Farm	20	20	1004	19.3	0.7
Russell Place Farm	34.5	34.5	1068	20.5	14
Ash Lodge Drive	24	24	938	18	6
Long Reach	24	24	1037	19.9	4.1
Sub-total	238.5	197.8	6376	122.4	75.4
Under 10			234	4.5	
Bespoke SANG			5457	104.9	
Total			12067	231.8	

- 4.43 Chantry Woods and Tyting Farm largely provide avoidance for the same area (Guildford town and around) so these SANGs are combined together in the scenario. This scenario leaves significant spare capacity that can provide avoidance for homes delivered in Guildford beyond the end of the plan period and to deliver SARP if Burpham Court Farm does not provide enough SANG capacity.
- 4.44 Ash Lodge Drive and Russell Place Farm provide avoidance for the west of the borough. Much of the land referred to as "Extension to Ash and Tongham Urban Area" in the site lists falls within the catchments of both SANGs. This land has been divided between these two SANGs, with just under two thirds allocated to Ash Lodge Drive SANG and the remainder allocated to Russell Place Farm SANG.
- 4.45 Long Reach and Effingham Common SANGs provide avoidance for the east of the borough. This scenario allocates all the proposed development in the east of the borough to Long Reach SANG and none to Effingham Common SANG as a parking area is needed to release Effingham Common's strategic SANG capacity. The Council has considered and continues to look at a number of options for providing a car park for Effingham Common SANG. However, allocating development to Long Reach provides more certainty as the permission for the SANG includes permission for a car park.
- 4.46 "Under 10" is not a SANG, but shows the total number of homes in developments of fewer than 10 homes. These homes can use any SANG that has spare capacity. The sites in the under 10 homes category will need a total of 4.5 hectares of SANG. There is enough spare capacity in several SANGs to provide avoidance for these developments. Some traveller sites of under 10 homes appear as separate entries on the lists when they are actually being delivered as part of a large residential scheme. In these cases, the traveller sites have been allocated to the same SANG as the residential development.
- 4.47 Site 131 (Policy A17) Land South of Royal Surrey County Hospital is allocated for hospital related uses which may include a number of staff residential units. As this figure is unknown, SANG has not been allocated. The tables show that there is a large amount of spare capacity available in Russell Place Farm and Chantry Woods/Tyting Farm SANGs that could provide avoidance.
- 4.48 The developments in the 'bespoke' category will provide their own SANGs and are not included in the allocation tables set out below.

- 4.49 Some sites fall within the five to seven kilometre SPA buffer zone which means that they may not require SANG avoidance, or may require SANG avoidance at a reduced rate. This will be judged on a case-by-case basis during the planning application stage. The sites that fall wholly within the five to seven kilometre zone account for a total of 372 homes. Each of these sites has been allocated a full provision of SANG capacity to demonstrate that the sites are deliverable. One site falls outside the seven kilometre zone and has not been allocated to a SANG. The maps at the end of the section show the locations of each site and the SPA zones.
- 4.50 It is intended that all the proposed strategic SANGs will be delivered either before the plan period begins in 2018 or early on in the first five year period. Therefore, the phasing of SANGs to coincide with the phasing of sites is not necessary.
- 4.51 The following tables set out which SANGs could provide avoidance for the developments in the LAA. The site numbers refer to the site numbers used in the LAA.
- 4.52 "Land to the South and East of Ash and Tongham" is not a single site, but is described in the Submission Local Plan: strategy and sites as a strategic location for development (site A29 in the plan). The allocation scenario divides this area of land into 2 chunks (identified as "A" and "B") and splits the allocation roughly equally between Russell Place Farm and Ash Lodge Drive SANGs.

Unplanned sites

4.53 The Submission Local Plan: strategy and sites must make an allowance for development from windfall sites (sites which have not been specifically identified through the local plan process). The plan includes an allowance for an additional 750 units as windfall. National Policy does not allow windfall calculations to include potential development on residential gardens. However, we must assume that this type of development may happen, so an additional SANG allowance must be made. Both windfall and garden developments are very likely to be on sites of fewer than 10 homes so avoidance can be provided by any SANG. 750 homes would require around 14.5 hectares of SANG, which can be comfortably accommodated within the spare SANG capacity. Development in residential gardens is not expected to contribute a large number of homes, so there is confidence that this development can also be accommodated.

SANG allocation scenario

Figure 4.2 Sites allocated to Chantry Woods and Tyting Farm SANGs

LAA No.	Policy	Location	Homes
34	A19	Land at Westway, off Aldershot Road, Guildford	38
50	A15	Land at Guildford Cathedral, Alresford Road, Guildford	93
81		Land at Shalford Station, Station Approach, Shalford	11
88		Guildford Adult Education Centre, Sydenham Road, Guildford	15
134	A1	The Plaza, Portsmouth Road, Guildford	90
126	A22	Land north of Keens Lane, Guildford	150
126	A22	Land north of Keens Lane, Guildford	60*

171	A7	Land and buildings at Guildford Railway Station, Guildford	350
174	A12	Bright Hill Car Park, Sydenham Road, Guildford	40
205	A6	North Street redevelopment, Guildford	400
219		Land at Guildford Fire Station, Ladymead, Guildford	6
1107	A5	Jewsons, Walnut Tree Close	175
1135		Land off Easington Place, Guildford	10
1164	A32	Surrey Police HQ, Mount Browne, Sandy Lane, Guildford	116
1179		Land to the rear of Copse Close, Chilworth	12
1210	A33	The University of Law, Guildford	112**
1264		Land rear of Greenhill and Burnside, Chinthurst Lane, Shalford	5
1584	A20	Former Pond Meadow School, Pond Meadow, Guildford	10
2118		Treetops Kennels & Loxhill Nursery, Old Portsmouth Rd, Guildford	12
2181	А3	Land between Farnham Road and the Mount, Guildford	70
2183	A13	Kernal Court, Walnut Tree Close, Guildford	100
2276		Land at Coltsfoot Drive, 1 Bryony Road and garages, Guildford	18
2286		Land at Old Manor Farm, Old Manor Lane, Chilworth	20
2323	A18	Land at Guildford college, Guildford	200**
2331	A16	Land between Gill Avenue and Rosalind Frankin Close, Guildford	61
2349		13, Lower Edgeborough Road	10
2370		White Lion Walk, High Street, Guildford	50
Total			2234

^{*} Care home bedspaces

Figure 4.3 Sites allocated to Riverside Park SANG

LAA Ref.	Policy	Location	Homes
		Land at Tithebarns Farm, Tithebarns Lane, Send, GU23 7LE	13
52		Land off Heath Drive, Send	20
2081	A44	Land west of Winds Ridge and Send Hill, Send	40
2081	A44	Land west of Winds Ridge and Send Hill, Send	2*
2244		Garage, Send Road	14
Total			89

^{*} Gypsy and Traveller pitches

Figure 4.4 Sites allocated to Burpham Court Farm SANG

LAA No.	Policy	Location	Homes
245	A24	Slyfield Area Regeneration Project, Guildford	1000
245	A24	Slyfield Area Regeneration Project, Guildford	4*
Total			1004

^{*} Gypsy and Traveller pitches

^{**} Student bedspaces

Figure 4.5 Sites allocated to Russell Place Farm SANG

LAA No.	Policy	Location	Homes
35		Land at Oak Hill, Wood Street Village	22
115		Land at 148 Broad Street, Wood Street Village	12
1363		Former scrap yard, Aldershot Road, Worplesdon	50
2115		Builders Yard (Elms Garden), Glaziers Lane, Normandy	15
2247	A29	Land to the south and east of Ash and Tongham (B)	850
2001	A27	Warren Farm, White Lane, Ash Green	57
2002	A28	Land to the east of White Lane, Ash Green	62
Total			1068

Figure 4.6: Sites allocated to Ash Lodge Drive SANG

LAA No.	Policy	Location	Homes
506		Land south of Grange Road, Ash (including the Coppins and land to the west, and land rear of the Gables, Viden and Birnam)	10
1118		Land off Kings Court, Oxenden Road, Tongham	10
1121		Works, Poyle Road, Tongham	10
1139		Public House, Oxenden Road, Tongham	15
2247	A29	Land to the south and east of Ash and Tongham (A)	879
2327		Courier House, Aldershot Road, Ash, Guildford, GU12 6PD	14
Total			938

Figure 4.7 Sites allocated to Long Reach SANG

LAA No.	Policy	Location	Homes
16	A37	Land at/to the rear of Bell and Colvill, Epsom Road, West Horsley	34
58		Land off Send Hill, Send	10
90		Countryside depot and tel. exchange, St Martins Close, E. Horsley	15
99		Land at Church Street, Effingham	22
240	A39	Land near Railway Station, Ockham Road North, East Horsley	100
350		Carlians Garage, Epsom Road, East Horsley	15
975	A40	Land to the north of West Horsley	120
1040		The Barn, The Street, Effingham	16
1183		Land rear of 6 Send Barns Lane, Send	20
1502		Former Tyrrell site, Long Reach, Ockham	12
1582		The Shed Factory, Portsmouth Road, Ripley	12
2026		Land to the west of Silkmore lane, West Horsley	20
2082	A42	Clockbarn Nursery, Tannery Lane, Send	60
2177		Land at Fangate Manor, St Martins Close, East Horsley	10
2258	A43	Land at Garlick's Arch, Send Marsh	400
2258	A43	Land at Garlick's Arch, Send Marsh	6*
2292		Paddock adjacent to Cranmore Lane, West Horsley	15
2366		HM Prison Send, Ripley Road,	150
Total			1037

Figure 4.8: Sites proposed for developments of under ten homes

LAA No.	Policy	Location	Homes
82		Land rear of Wanborough Station, Flexford, Normandy	8
93		Pewley Hill Centre, Guildford	6
165	A51	Land at Cobbetts Close, Worplesdon	3*
236		Old Reservoir, Oxford Terrace off Sydenham Road, Guildford	5
241	A50	Land at Whittles Drive, Aldershot Road, Normandy	2**
369		Land at Grangefield, Jacobs Well, Guildford	6
512		117 and 119 Epsom Road, Guildford	8
533		The Forge, 129 Ash Street, Ash	5
669		111 Epsom Road, Guildford	5
817		1 Ward Street, Guildford	8
917		Garage, The Common, Horsham Road, Shalford	8
939		Land adjoining/to the rear of Waverley, 22 Stocton Road, Guildford	6
1006		51, 53, 55 Summersbury Drive, Shalford	5
1017		Land at Old Manor Gardens, Old Manor Gardens, Chilworth	6
1038		Orchard Walls, Beech Avenue, Effingham	5
1103		121 and 121a Epsom Road, Guildford	7
1104		Framptons Yard & Bryanstone House, Bryanstone Ave., Guildford	9
1147		Land rear of Horseshoe Lane West and Beechway, Guildford	5
1170		Dryden Court, Lower Edgeborough Road, Guildford	6
1180		Shalford Social Club, 10 Queens Hall, Station Road, Shalford	5
1262		69 Woodbridge Road, Guildford	7
1265		Land at Wisteria, Glaziers Lane, Normandy	7
1267		Tangley Lea, New Road, Chilworth	5
1268		Oakhaven, Webbers Post and Springfields, Clandon Road and Field Way, Send Marsh	7
1274		Land rear of 24 and 26 Potters Lane, Send	6
1275		Hall, Weston Lea, East Lane, West Horsley	5
1309		Kingdom Hall, 236 High Street, Guildford	6
1328		Land to the rear of 1-11 Pirbright Terrace, Pirbright	9
1399	A55	The Orchard, Puttenham Heath Road, Puttenham	2*
2055		Hurst House, High Street, Ripley	5
2097		Land at 79 The Street, Tongham	4
2106	A54	Lakeview, Lakeside Road, Ash Vale	3*
2114	A53	Roundoak, White Hart Lane, Wood Street Village	1*
2119	A52	Four Acre Stables, Aldershot Road, Worplesdon	6*
2120	A56	Valley Park Equestrian Centre, East Shalford Lane, Shalford	5*
2125	A57	The Paddocks, Rose Lane, Ripley	4*
2216		Finance House, Park Street, Guildford	6
2324		Stadium Works, Oxenden Road, Tongham	6
2343	A49	Palm House Nurseries, Normandy	6*

2371	Land north of Lower Road, Effingham	6
	Ipsley Lodge Stables Ipsley Lodge, Hogs Back, Seale	2*
	16 The Street, Tongham, Farnham, GU10 1DQ	1
	69 Send Road, Send, Woking, GU23 7EZ	1
	Elmsleigh Farm, Send Barns Lane, Send, Woking, GU23 7BP	6
Total		234

^{*} Gypsy and Travellers pitches

Figure 4.9: Sites that will provide bespoke SANG

LAA No.	Policy	Location	Homes
15	A38	Land to the west of West Horsley	135
46	A25	Gosden Hill Farm, Merrow Lane, Guildford	1700
46	A25	Gosden Hill Farm, Merrow Lane, Guildford	8*
53	A35	Land at former Wisley airfield, Ockham	2000
53	A35	Land at former Wisley airfield, Ockham	8*
53	A35	Land at former Wisley airfield, Ockham	100**
311	A26	Blackwell Farm, Hogs Back, Guildford	1500
311	A26	Blackwell Farm, Hogs Back, Guildford	6*
Total			5457

^{*} Gypsy and Traveller pitches

Figure 4.10 Sites that do not need SANG (Outside the SPA zone of influence)

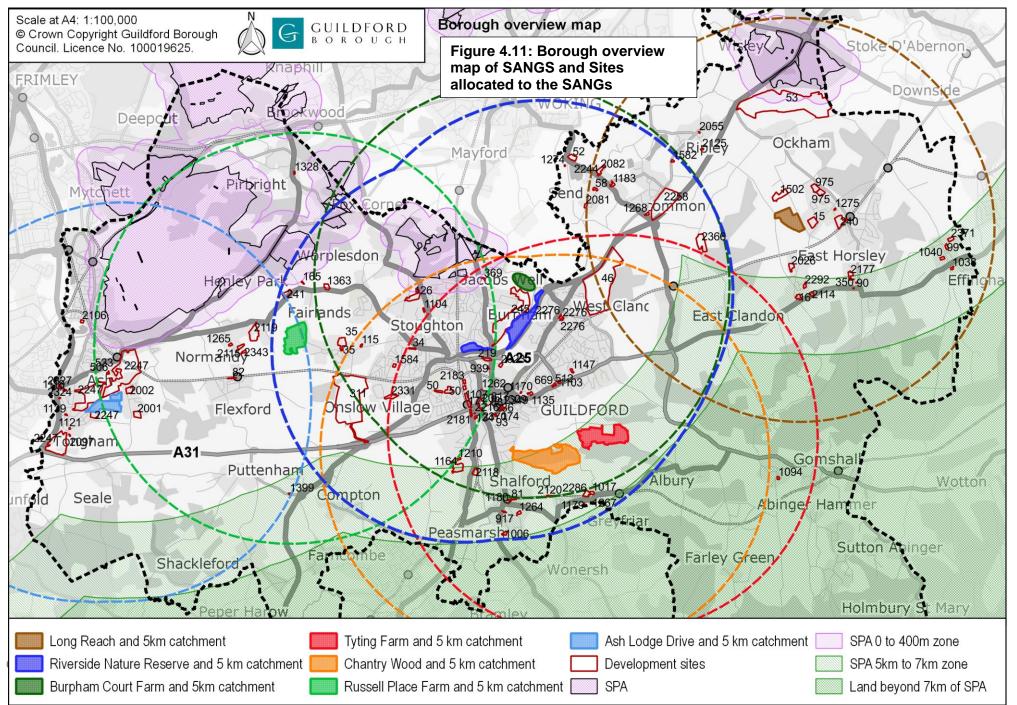
LAA No. Policy	Location	Homes
1094	Rack Close, The Spinning Walk, Shere	8

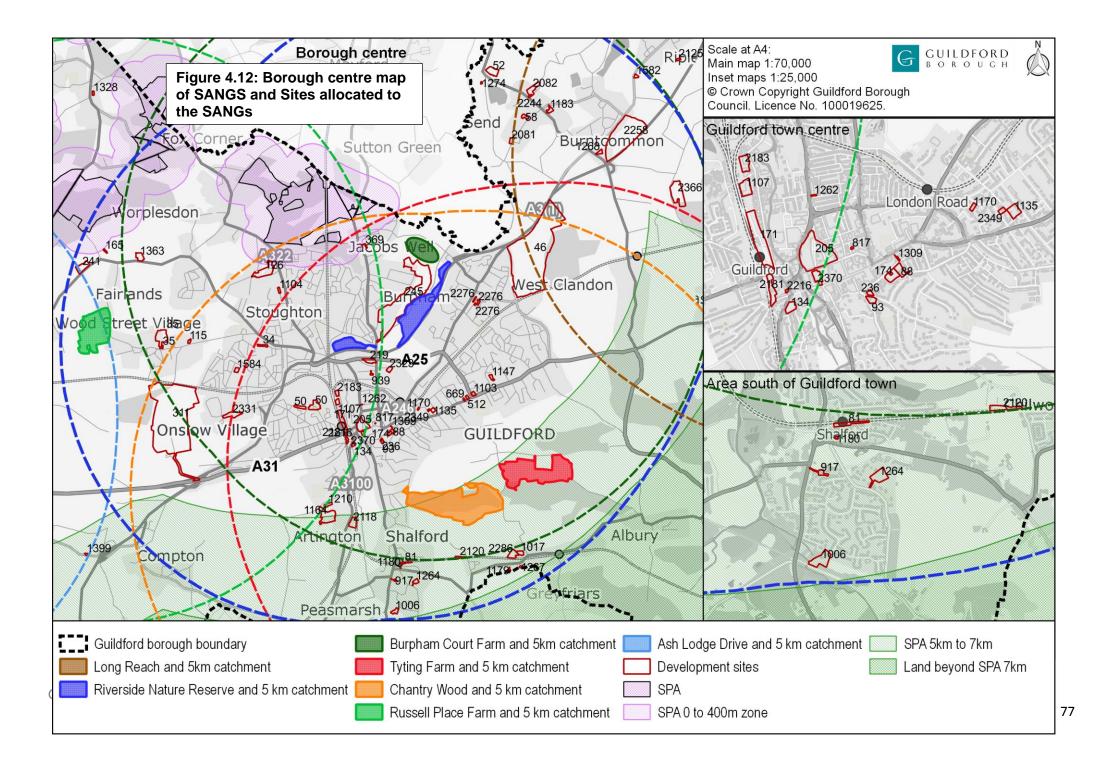
Maps

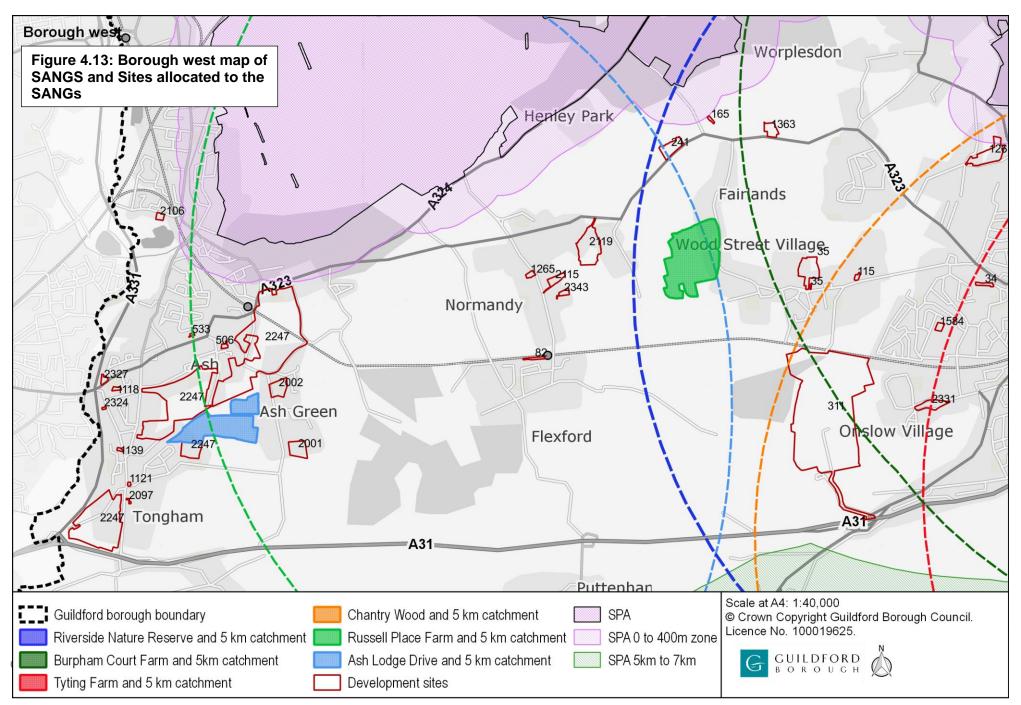
- 4.54 The following maps show the scenario described in the tables above. The exact boundary of Burpham Court Farm SANG has not yet been decided so this SANGs is represented on the map as a shape which indicates the location of the SANG only.
- 4.55 Bespoke SANGs are also represented by shapes that indicate the broad location of these SANGs and not the boundaries of the land.

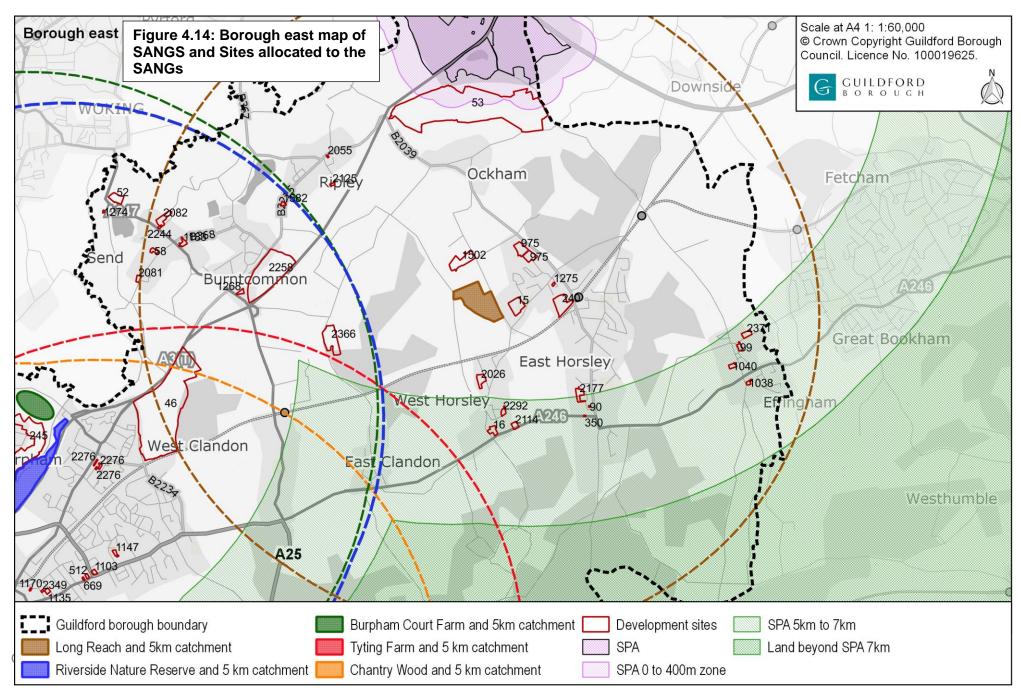
^{**} Travelling showpeople plots

^{**} Care home bedspaces









Funding and delivery

The SPA tariff

4.56 SANGs are funded through the SPA contribution paid by developers. The contribution has two elements: a SANG tariff that pays for the delivery of SANGs and maintenance and management of them in perpetuity, and a SAMM tariff that funds the SAMM project (see below).

SAMM

4.57 The SAMM project delivers measures that protect the SPA from recreational pressure through mitigation including education (both on and off site), the diversion of SPA users to alternative SANG sites, the provision of wardens on the SPA, monitoring of visitors and working with key stakeholders and organisations to deliver effective management of the SPA. SAMM does not constitute infrastructure so is not dealt with in this section, but has been taken into account in the viability report for the Submission Local Plan strategy and sites. The viability report uses the current SAMM tariff, which is proposed to continue into the next plan period.

The SANG and SAMM tariffs

- 4.58 The SANG tariff is calculated based on the expected costs of delivering and managing SANGs in the next plan period. The tariff sets a differential rate based on dwelling size (number of bedrooms) as a fair reflection of the number of additional residents likely to arise.
- 4.59 The table below sets out the current SANG and SAMM tariffs which will be carried into the next plan period. The SANG tariff will be updated each year and will increase in line with the Retail Price Index (RPI) measure of inflation. The SAMM tariff will not increase each year.

Figure 4.15: SANG tariff

Dwelling Size	Expected occupancy	2017/18 SANG tariff	SAMM tariff	Total
1 bedroom	1.41	£3,517.46	£411.01	£3,928.47
2 bedroom	1.98	£4,939.41	£577.16	£5,516.57
3 bedroom	2.53	£6,311.47	£737.48	£7,048.95
4 bedroom	2.99	£7,459.01	£871.56	£8,330.57
5+ bedroom	3.43	£8,556.67	£999.82	£9,556.49
Sang tariff per per	rson - £2,494.65*			

- 4.60 The SANG costs in the Infrastructure Schedule (Appendix C in the Proposed Local Plan Strategy and Sites) show the total amount of money needed to deliver and maintain and manage each SANG for 125 years. The figures have been calculated based on the size of the SANG and the amount of funding it will attract when fully allocated, which in turn is based on the expected costs set out in the SANG management plans in the strategy. Where SANGs have already been delivered, the cost excludes any funding already received. The figures are at current value and do not take future interest and inflation into account.
- 4.61 It is difficult to predict accurately the cost of maintaining SANGs for 125 years as this is

subject to a wide number of factors. The SANG tariff will be reviewed on a regular basis through reviews of the strategy and could be subject to change. In particular, the Council will monitor occupancy rates across the borough.

Funding mechanism

- 4.62 SANG is currently funded through s106 obligations. The government has introduced a pooling restriction which prevents more than five s106 contributions being pooled towards provision of a single infrastructure project or type of infrastructure. All existing SANGs have been brought forward on existing public open space that is already in recreational use. This land has been improved in order to create SANG capacity, in line with the SANG guidelines produced by Natural England. Improvement does not contribute provision, so current SANGs have not been affected by the pooling restriction.
- 4.63 In the next plan period, new SANGs will be delivered on land that was not previously public open space and the funding of those SANGs may be considered to constitute provision of infrastructure, rather than improvement. The Council may fund SANGs through an alternative mechanism to s106, which could be a legal agreement between the Council and a developer or funded through CIL. Under the legal agreement approach, developers will be able to enter into an agreement with the Council in order to secure mitigation for their developments. The Council has chosen to consider funding SANGs this way rather than through CIL because there are a number of developments that are exempt from CIL, most notably affordable and self-build housing. If the Council is unable to fund the provision of SANG for these developments, it would be unable to grant permission for them as impacts on the SPA could not be avoided. The provision of affordable housing is a strategic priority, so it is considered that removing SANG funding from CIL is justified. The Council has received legal advice which indicates that the legal agreement approach is appropriate.

SANG delivery

- 4.64 Tyting Farm and Burpham Court Farm are owned by the Council. The Council will deliver SANGs on this land as Council projects, funded by developer contributions.
- 4.65 The IDP identifies strategic SANGs on land that is not owned by the Council at Long Reach, Russell Place Farm and Ash Lodge Drive. These SANGs have all received planning permission. The s106 agreement for Ash Lodge Drive provides for the Council to take over ownership of this land in chunks as s106 contributions for SANG are received from other developers. The other two SANGs may also be transferred to the Council if an agreement is reached, though they may also be delivered and managed as privately owned SANGs.
- 4.66 The developments at the Former Wisley Airfield, Gosden Hill Farm, Blackwell Farm and Manor Farm (West Horsley) are proposing bespoke SANG to provide avoidance for their own developments. The developers of these sites may ask the Council to take over and manage these SANGs or may secure in-perpetuity management in another way. The Council will set out guidelines/ procedures for how SANGs can be transferred into Council ownership and managed using developer contributions where this is considered favourable.

5. Education

Lead agency	 Surrey County Council (for school place planning / commissioning) Academies, including Free Schools Trusts and voluntary aided schools Private schools
Key reports and data	 Surrey County Council, Surrey School Organisation Plan (December 2016) Surrey County Council's <u>Guildford draft Local Plan : Education Review</u> (May 2016) <u>Guildford Land Availability Assessment 2017</u>

Early years

- 5.1. Early years childcare provision in Surrey comprises independent nurseries, school nurseries, crèche's, after school clubs, playgroups, holiday and weekend schemes, and individual child minders.
- 5.2. The Childcare Act 2006 places a duty on all local authorities in England to ensure there is enough childcare services for parents that want them. Surrey County Council is therefore responsible for providing certain elements of Early Years provision, particularly with regard to identifying any gaps in childcare provision.
- 5.3. Many of the Early Years services are provided independently, however Surrey County Council retains a responsibility to audit the statutory standards for learning, development and care for children from birth to five that all early years providers must meet.
- 5.4. Surrey County Council's <u>Childcare Sufficiency Assessment 2014</u> has identified nine areas where current provision will not be able to meet future demand for early education. Within Guildford borough, current provision is considered to be insufficient to meet future needs in Burpham, Merrow, Stoke, Stoughton and Westborough wards.
- 5.5. Planned strategic developments will need to make provision for early years within their site, or where Surrey County Council considers more suitable, will be required to make a contribution to off-site provision. The Infrastructure Schedule at EYED2 references infrastructure projects that will meet this need. Major developments will produce increased demand for early years provision developer contributions can be used to facilitate delivery of new provision. Ensuring adequate provision in the rural areas is likely to present the greatest challenge for adequate cover.

Primary and secondary schools

- 5.6. Most state schools in Surrey are local authority maintained. The introduction of the Academies Act in May 2010, however, has led to a number of schools in Surrey converting to academy status. These still remain publicly funded but are independent of local authorities. As with private schools, academies have significantly greater autonomy than local authority maintained schools (including length of the school day, the curriculum, and staffing). There are also Foundation and Voluntary Aided and Trust Schools within the borough.
- 5.7. Free schools are fairly recent additions. These are state maintained schools, and are expected to offer a broad and balanced curriculum. They are also subject to Ofsted inspections and are expected to comply with standard performance measures. There are currently no Free schools in the borough. Details of schools in the borough and close by are provided in the Guildford Infrastructure Baseline 2013, and maps are provided below at Figures 5.1 and 5.2.
- 5.8. Extensions to existing schools are generally planned and managed by the local education authority, which for Guildford bough is Surrey County Council. However, all new schools are now delivered by Academies (often now provided as part of an Academy Partnership), or Free Schools (a type of Academy). However, SCC can deliver a new school as a last resort, for example if no Academy or Free School was interested. SCC would need to make a bid to the Education and Skills Funding Agency (ESFA) for funding to construct and support ongoing running costs of a Free School.
- 5.9. Multi-Academy Trusts are organisations that that run a number of academies, including Free Schools under a single charitable company. There are several Academy Trusts now active in the borough, including Guildford Education Partnership, The Howard Partnership Trust and the Kemnal Academies Trust. Guildford Educational Partnership (GEP) is led by George Abbot School and Boxgrove Primary School, and now also has several other member academies including Kings College, Guildford and Guildford Grove, Loseley Fields and Sandfield Primary Schools. The Howard Partnership Trust includes the Howards of Effingham, and the Kemnal Academies Trust manages Weyfield Primary Academy.
- 5.10. Surrey has the largest number of pupils educated in fee-paying schools of all education areas in the country outside of London, with some 36,835 school spaces (source: school census 2010). A relatively high proportion of Guildford borough's children attend independent schools in Surrey. Approximately 22 per cent of the county's school age population attend a private school, compared approximately seven per cent nationally across the country (source: Department for Education).
- 5.11. Private schools in the borough include Guildford High School, Lanesborough Schools, Tormead School, Longacre School, Rydes Hill Preparatory School, Royal Grammar School, Cranmore School, Ripley School, St Theresa's, Priors Field School, and Aldro School. Private schools provide over 5,000 fee-paying school places, from primary to sixth-form levels. In Guildford Borough, there are slightly more boys being educated privately than girls.

Figure 5.1

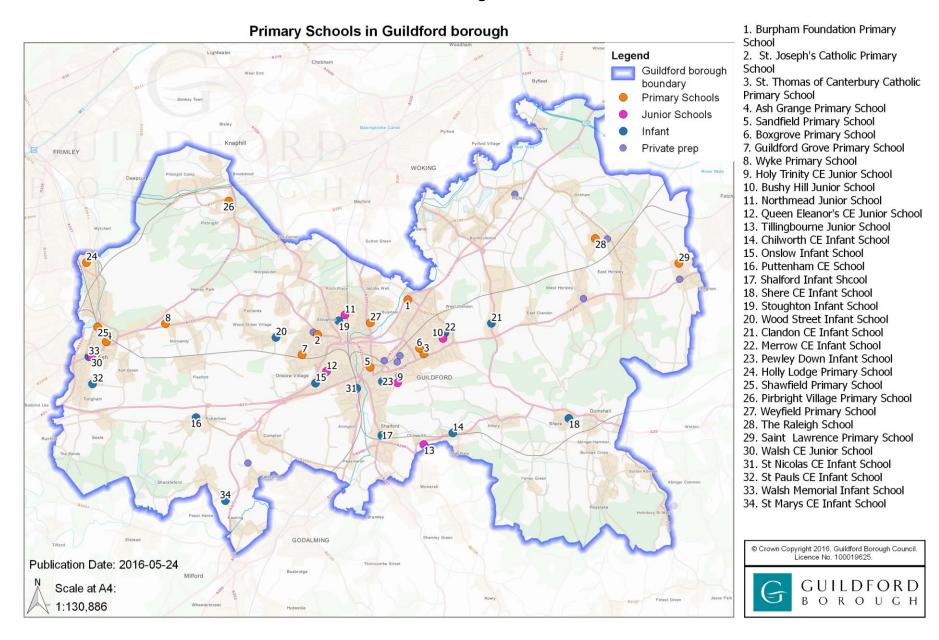
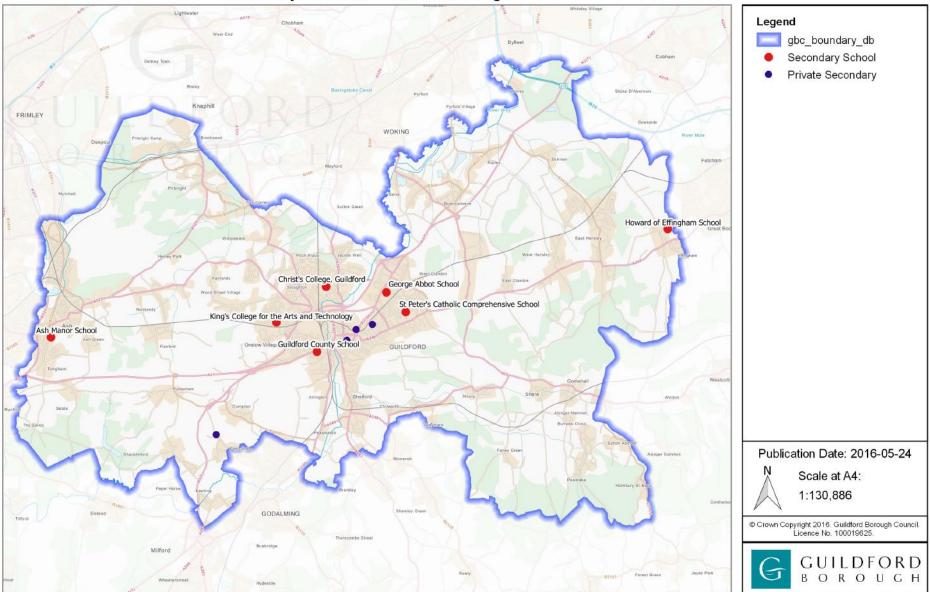


Figure 5.2 Secondary Schools in Guildford borough



Planning for school places

- 5.12. Schools are arranged in school planning areas, for primary and secondary school planning. School places are planned on basis of school planning areas rather than by school. The borough is currently split into nine primary planning areas and two secondary planning areas. These cover 39 primary schools and 6 secondary phase schools. Ten of these schools have converted to academy status.
- 5.13. Planning areas are based on geographic proximity of schools, connections between schools such as feeder links and typical 'catchment' areas of schools. Most schools in the borough do not use catchment areas for schools admissions. Catchment in this context is the typical geographic area from which a school draws its pupil cohort.
- 5.14. Schools operate most efficiently and effectively when full or nearly full. To this end, Surrey County Council seeks to keep the number of surplus places (places in schools that are unfilled) to a minimum. It is not desirable for the County Council to try to eliminate all surplus capacity, as it is important to retain a degree of flexibility in the system to respond to parental choice and to unexpected changes in pupil numbers.
- 5.15. Many schools within the borough are popular, oversubscribed and at, or very close to capacity. The split rural / urban character of the borough and its relatively large geographic size means that it has been necessary to increase capacity at some schools in areas that are consistently oversubscribed, whilst others function with surplus places. Although there are schools which are less popular and have spaces available, the local authority has a duty to provide school places and the policy is to provide local schools for local children.
- 5.16. Expansions are based on trends of oversubscription, residence location of applications for places and the ability of the school to expand (site size, planning, transport etc.). No new school has been opened in the borough for many years; although some schools have merged or reorganised and a small number were closed due to lower demand in the borough, mainly as a result of low birth rates.
- 5.17. There has been a major programme of temporary (i.e. "bulge" classes) and permanent expansion of primary schools across the borough of Guildford over the last five years to cope with the increase in school age population. Since 2008, the following primary schools have been permanently expanded (Figure 5.3):

Area	School	Expansion details
Ripley & Send	Ripley C of E Primary	Expansion from infant to primary, 2008
North Guildford	Boxgrove Primary	+ 1 form of entry, 2011
Puttenham & Shackleford	St Mary's Infant	+ 5 places, 2012
North Guildford	Burpham Primary	+ 1 form of entry, 2013
West Guildford	St Joseph's Primary	+ 1 form of entry, 2013
Puttenham & Shackleford	Puttenham Infant	+ 4 places, 2014
South Guildford	Onslow Infant	+ 1 form of entry, 2014
South Guildford	Queen Eleanor's Junior	+ 1 form of entry, 2014
West Guildford	Stoughton Infant	+ 1 form of entry, 2015
West Guildford	Worplesdon Primary	+ 1 form of entry at junior classes, 2016
East Guildford	Clandon CofE Infant	Change from infant to primary 2016, and reduction in Pupil Admission Number (PAN) in 2017 (from 25 to 15)

Figure 5.3: Recent and planned school expansions

- 5.18. The impact of the increased demand for primary places will begin to affect the secondary sector from 2017 onwards and some secondary schools will need to expand in order to cope with the projected demand for places. From 2017, St Peter's Catholic School will expand by 1 form of entry, and Guildford County School, also in Guildford town, will increase by 20 places a year.
- 5.19. We are working with Surrey County Council's School Commissioning Team on an ongoing basis to consider how many additional school places will be needed to educate the children of the borough in the future. They have used and are using the 'Edge-ucate' pupil projection system to assess the number of children likely to live in the homes that already have planning permission but which are not yet built, as well as on the sites included in the draft Local Plan. They have also considered and commented on the potential impact of the Local Plan on existing education infrastructure across the borough. As well as the homes already with planning permission, and demographic growth, the draft Local Plan includes provision for the delivery of at least 12,426 additional homes by 2034. These sites comprise a mixture of urban and rural infill development, extensions to existing villages and strategic-scale sites. Figure 5.4 reflects a high-level view of the additional forms of entry required based on potential development sites.
- 5.20. Surrey County Council's School Commissioning Officers and Strategic Planning and Infrastructure Officers continue to work with us to find the most effective and suitable method to secure the funding and delivery of schools we need for the future.

	Likely pupil yield from additional dwellings* * based on 16,261 dwellings	Potential number of pupils per year	Additional forms of entry (FE) required
Primary	4,065 (estimated pupil yield 0.25 per dwelling)	581 (pupil yield/7 year groups)	Up to 19 (pupils per year/ 30 in a class group)
Secondary	2,926 (estimated pupil yield 0.18 per dwelling)	585 (pupil yield/5 year groups)	Up to 20 (pupils per year/ 30 in a class group)

Figure 5.4: Likely child yield from potential development sites identified in the draft Local Plan and Land Availability Assessment, including existing unimplemented planning permissions (data provided by GBC)

Future primary needs and planned provision

- 5.21. One or two entry forms (1-2FE) may be required in the **Ash** area if further planning permissions are granted. It is likely that this could be provided by an expansion of Ash Grange Primary School. (see Infrastructure Schedule at PED6).
- 5.22. In-fill housing development in and around **Guildford town** is likely to require mitigation between years three and ten of the new Local Plan. There are limited options for further primary expansion in Guildford Town. Alternative sites and options will be considered with local schools, alongside provision with strategic sites. (see Infrastructure Schedule at PED7).
- 5.23. The in-fill housing planned for the **Worplesdon** ward to the **West** of Guildford is likely to result in the need for an additional primary form of entry to the west of Guildford. Options will need to be considered for additional primary provision in the area, which will be limited due to expansions that have already taken place.
- 5.24. Later on in the Plan period, approximately 1,000 new homes are proposed in the Slyfield Regeneration Area (SARP) strategic site, which would result in the need for an additional 1-2FE. It is proposed that this need would best be accommodated by an expansion of Weyfield Primary Academy. (see Infrastructure Schedule at PED5).
- 5.25. The wards to the **north-east** of Guildford town including Horsleys, Effingham, Lovelace and part of Burpham, are likely to be impacted by new housing planned for the first five years of the planned period. There is currently some capacity at schools in this area, Ripley Primary School and at Clandon Church of England School, which is projected to continue. SCC officers consider it most suitable to fill those schools before looking at expansions at other primary schools in the area.
- 5.26. If the Former Wisley Airfield **strategic site** is allocated for development and gets planning permission, it would not be sensible to expand a school in the area before a new primary school is opened at Wisley (see Infrastructure Schedule at PED2). SCC officers will continue to monitor the projections and the developments closely in relation to implications for the demand for places.
- 5.27. The Raleigh School, a primary academy in West Horsley is currently located on a fairly confined

site, with its playing fields on a separate site. The village of West Horsley is proposed to be inset from the Green Belt, which may offer opportunities for long term future consolidation on a single site.

5.28. Other **strategic sites** included in the Submission Local Plan (namely Gosden Hill and Blackwell Farm) include plans for 2FE primary schools within the new developments (see Infrastructure Schedule at PED3 and PED4). This, combined with provision relating to the other strategic sites, is likely to provide up to eight additional forms of entry (FE) across the borough. We will require these to be funded by the developers, alongside Education and Skills Funding Agency's Basic Needs funding, if available.

Future secondary needs and planned provision

- 5.29. Each new home built will generate fewer secondary school children than primary school children, using Surrey County Council's child yield figures. Approximately 4,000 new homes (depending on their size) are needed to require a new secondary school. No single site included in the Submission Local Plan 2017 would include enough homes to need a new secondary school to accommodate children who will live on the site.
- 5.30. Alongside SCC officers, in assessing the potential suitability of sites to accommodate a new secondary school, we have therefore considered which sites:
 - would be closest to the most new homes planned (in order to minimise need to travel);
 - are / will be (by time the school is needed) accessible by public transport, and by good cycle and pedestrian links;
 - are considered suitable in terms of planning policy to accommodate a new school, including designations in the draft Local Plan;
 - would be made available to accommodate a secondary school with school playing fields.
- 5.31. A list of sites that were considered for a new secondary school is included in Guildford borough's <u>Land Availability Assessment 2017</u>. This includes potential sites that were suggested either by SCC, GBC or by respondents to the previous draft Local Plan.
- 5.32. Across the borough, in the period 2019 2025, the new Local Plan would result in a need for at least 5 forms of entry above that already planned. Beyond 2025 there is likely to be a further need for secondary places, potentially up to a further 5 forms of entry, arising from strategic sites. Surrey County Council concludes that based on analysis of planned housing sites, numbers and locations, new secondary provision to the east and west of Guildford town is likely to be required.
- 5.33. Locating new provision within the strategic sites at the former Wisley Airfield and Gosden Hill to the east (4FE each see Infrastructure Schedule at SED2 and SED1 respectively) and Blackwell Farm to the west (6FE see Infrastructure Schedule at SED3) is likely to provide the most sensible geographic locations, being close to where the majority of pupils are likely to reside.
- 5.34. New housing in the **Ash and Tongham** area will gradually impact on secondary schools in this area within the first three years of the plan, but it is not anticipated to be significant. A likely need for an additional 1FE in this area is being closely monitored; viability studies have assessed the potential to expand Ash Manor School. (see Infrastructure Schedule at SED5). The cross-over of

secondary school pupils with Hampshire will also need to be taken into account. Existing capacity at the Connaught School in nearby Aldershot, Hampshire is likely to be at least partly filled by children living at the Aldershot Urban Extension, currently under construction.

5.35. In **Guildford town**, in-fill development within the first five years of the plan is expected to bring pressure on secondary places in the town. Surrey County Council will continue to monitor capacity closely, in line with the currently planned expansions to meet the need coming through the primary phase, in order to assess whether further expansion is required.

6. Health and social care

GPs and dental surgeries: Primary health care

Lead agency	 Clinical Commissioning Groups (CCGs) – these replaced Primary Care Trusts in April 2013. There are three CCGs covering the borough: Guildford and Waverly Clinical Commissioning Group (CCG) North West Surrey Clinical Commissioning Group Surrey Heath Clinical Commissioning Group
Key reports and data	None

- 6.1. There are currently approximately 100 GPs practising in 20 surgeries across the borough with approximately 155,000 patients on their registers. The location of each is shown below at Figure 6.2. The existing provision equates to one GP for every 1,550 residents. However these surgeries are not spread evenly across the Borough, and when examining local list sizes per GP some existing under provision is apparent on surgery- by-surgery basis. The standard for GPs provision is for 1 GP per 1,900 patients (NHS England's standard). At 2.34 people per average home (NHS England's standard), this equates to a need for 1 GP per 812 new homes. The size and type of new homes provided also play a role in assessing the need for expanded facilities to provide for additional GPs consulting rooms, or other treatment rooms.
- 6.2. As described in the Infrastructure Baseline 2013, and shown in Figure 6.1 below, the vast majority of the borough is within Guildford and Waverley CCG. GBC officers have met with representatives of Guildford and Waverley CCG, GPs from across the borough, NHS England, and the Royal Surrey County Hospital chief officers to discuss future health needs of the borough's population. This work is ongoing, and, as greater commitment can be made with more certain proposals, we anticipate further input from Guildford and Waverley CCG and from the GPs practices that would be impacted by the planned housing development.
- 6.3. NHS England has advised that it is more cost effective and easier to deliver extensions to existing primary health centres than to commission and build a new one, so it may be more suitable for the current surgery nearby to expand than for totally new provision. Securing funding from NHS England for feasibility and design work, as well as for the land purchase and construction costs for new primary care facilities is a complex and drawn-out process. The process of bidding for funding from NHS England, which requires multiple bidding rounds increases uncertainty of delivery and timing of provision of new facilities.
- 6.4. Both natural population growth and the planned housing development sites will add to the borough's population and increase patient rolls in and around the borough (remembering that people do not have to be registered with a GP in the borough they live). We have been in contact

with several existing surgeries to discuss existing capacity and whether they will need to expand.

- 6.5. Guildown Group Practice is a group practice of four surgeries which includes The Oaks, located at Applegarth Avenue in the West of the Guildford urban area. This surgery is currently operating out of premises that lacks the space for the number of consultants, nurses, and the specialist treatment facility rooms needed to meet future needs. It is proposed to provide a larger, modern medical centre at the nearby former Pond Meadow school site as part of a wider community hub, (see Infrastructure Schedule at HSC1) and the site is proposed to be allocated for these uses in the draft Local Plan (see Policy A20). We continue to work with interested organisations to secure the funding for a new health and community facility to serve this area. It is currently likely that some enabling housing would be needed to contribute to building the new facility.
- 6.6. The Horsley Medical Practice currently leases the Medical Centre at Kingston Avenue, East Horsley from Guildford Borough Council (GBC). It is part of a wider site owned by GBC which includes sports facilities, a community hall, and related car park. GBC and the Practice are exploring what is needed to ensure that the Practice can meet future primary health care needs of the area. (see Infrastructure Schedule at HSC5).
- 6.7. NHS England has advised us that they would prefer to have land contributed by developers of significant strategic sites, ideally with a new building provided. This is considered to be more useful than simply receiving a financial contribution or revenue funding. There is a time-lag of about four years from a newly-constructed home first being occupied, to the relevant CCG receiving its funding for those new patients registering with them.
- 6.8. Further to the above, several other areas of planned growth in the borough will require additional primary health care provision.
- 6.9. In this regard, the Infrastructure Schedule at HSC6 responds to the need for health care provision in relation to the Ash and Tongham strategic location for development. Provision in relation to the need is further supported by requirements under Policy A29. A site close to Ash Lodge Drive, Ash that has planning permission for 400 homes, includes in its planning permission a requirement for land to be safeguarded for a GPs surgery.
- 6.10. Blackwell Farm proposed strategic site will add to the patient roll at surgeries in the Guildown Group Practice, and is likely to need extended or additional primary health provision. (see Infrastructure Schedule at HSC3).
- 6.11. Furthermore, additional health care provision is required in relation to development proposed at Gosden Hill and the Former Wisley Airfield strategic sites and in this regard, provision is made in the Infrastructure Schedule at HSC2 and HSC4 respectively.
- 6.12. We will continue to work with NHS England and the relevant CCGs, particularly Guildford and Waverley CCG, the GP Practices, and the Royal Surrey County Hospital, to ensure that health facilities in the borough will meet the health needs of future population, and will continue to work on ensuring that funding and delivery is secured when needed.

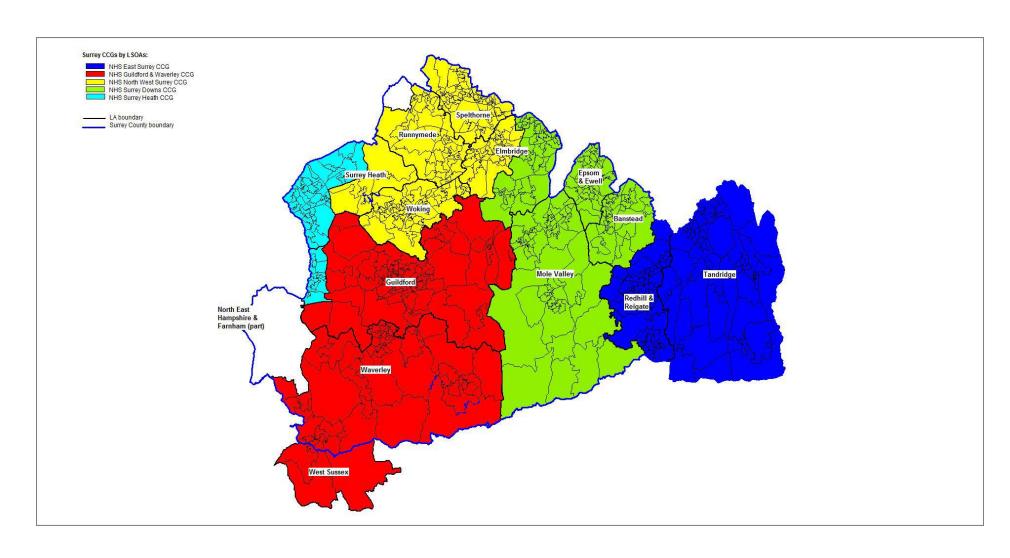
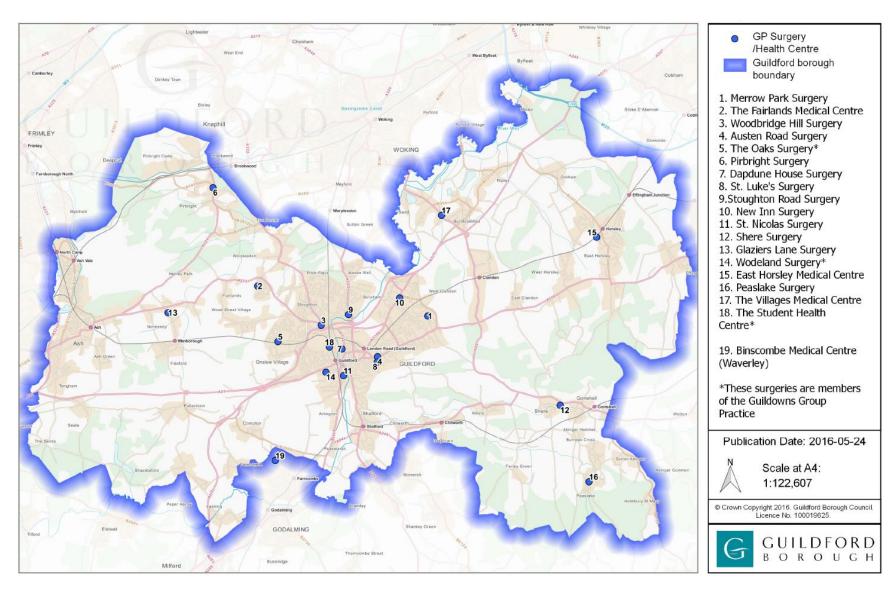


Figure 6.1: Clinical Commissioning Groups in Guildford Borough

Figure 6.2: GP surgeries in Guildford borough



7. Emergence services

Police

Lead agency	Sussex and Surrey Police
Key reports and data	Police and Crime Plan for Surrey 2016-2020

7.1. Surrey Police do not have defined service standards in terms of how many officers are required per head of population/per household. The number of staff needed to police an area is not based on population but on criminality. Criminality, or the level of crime, is influenced by a range of variables such as the type of housing, population density, housing quality and whether there is a stable population. Nevertheless, an increase in crime and incidents is anticipated that will require additional police infrastructure, such as facilities and equipment, to provide safe and sustainable future communities.

Existing provision

- 7.2. Current facility provision in Guildford borough includes:
 - Police Headquarters at Mount Browne
 - Guildford Police Station, Margaret Road, Guildford
 - Guildford Neighbourhood Team co-located base within Guildford Borough Council offices at Millmead
 - Neighbourhood Police Post at Japonica Court, Shawfield Road, Ash
 - Neighbourhood Police Post at St Martins House Business Centre, East Horsley
- 7.3. The mobile police office visit Tesco's in Ash, Horsley Rail Station and Shere Village Hall.

Planned provision

- 7.4. Surrey Police have indicated that there will be the need for a satellite neighbourhood policing post, based at or near the former Wisley airfield development in order to support this large development, which is located in an outlying location from the existing Guildford Police Station. Provision in this regard has been made in the Infrastructure Schedule as part of this IDP. (see Infrastructure Schedule at ES1).
- 7.5. They have further indicated that there may be a medium to longer-term need to provide additional space within any adapted or re-provided Guildford Police Station, to ensure that these staff and necessary equipment can be accommodated.

Fire and rescue

Lead agency	Surrey County CouncilSurrey Fire and Rescue Services (SFRS)
Key reports and data	Surrey Fire and Rescue Public Safety Plan (2016 – 2025) Surrey Infrastructure Study (2016)

- 7.6. The standards for fire response in the county prioritise people instead of buildings and are based upon the percentage of population receiving a fire engine response within eight minutes and two fire engines within 12 minutes. As computer systems have been installed in modern fire engines, it is now the most local fire engine that responds to an emergency regardless of where the fire station is located.
- 7.7. Fire services plan their services using a local risk management approach rather than one based on national standards for fire services based on population size and general response times. Services are located and provided in a way that best manages risk, which has led to significant changes in the way fire services have allocated funding and the location of their infrastructure across the country.

Existing provision

- 7.8. There are two fire stations located within Guildford borough:
 - Ladymead, Guildford
 - Goose Green, Gomshall in the east of the borough

Planned provision

7.9. Guildford has recently opened a new fire station adjacent to the original site. A number of sites were considered, however the existing site was preferred. It has good links to the A3 north and south and the location provides the fastest response times for the catchment area.

Ambulance

Lead agency	South East Coast Ambulance Service (SECAmb) NHS Foundation Trust
Key reports and data	South East Coast Ambulance Service Five Year Strategic Plan (2017 – 2022) Surrey Infrastructure Study 2016

- 7.10. Ambulance provision is assessed at a regional and county level. Demand for the ambulance service is driven by a number of factors including growth in population, changes in the type of patients accessing the service and the transformation of local NHS services, and is reviewed regularly.
- 7.11. There have been changes in the manner in which SECAmb provides their service in recent years. This includes expanding the clinical capability of ambulance staff, and changing priorities with patient assessment, treatment and referral, which has impacted on estate and fleet requirements. The latter has seen the introduction of Make Ready Centres (MRCs), which differs from traditional approaches to ambulance stations. MRC reflects a vehicle and equipment preparation programme designed to minimise cross infection, maximise patient safety and improve efficiency. All of the vehicle preparation is undertaken by specially-

trained, non-clinical Make Ready Operatives (MRO) staff, allowing clinicians to focus on the delivery of high-quality patient care.

Existing provision

7.12. There are two ambulance stations at Guildford and Tongham and ambulance stations in Godalming and Woking, which serve parts of the borough. The Surrey Air Ambulance provides a Helicopter Emergency Medical Service (HEMS) and air ambulance service throughout Surrey. Across Surrey, SECAmb have indicated there is a need to rationalise the way the services are delivered to ensure that they are aligned with demand, are delivered quicker and provide a more cost-effective service.

Planned provision

7.13. The ambulance service advises that it can deal with incremental increases in new housing and their impact on the service through its annual review of demand process. A new ambulance community response post and a MRC have been included in the Infrastructure Schedule located at the existing ambulance station at the Street, Tongham in response to SECAmb requirements. (see Infrastructure Schedule at ES2).

8. Community facilities

Libraries

Lead agency	Surrey County CouncilShere Village Hall Diamond Jubilee Library
Key reports and data	None

- 8.1. Surrey County Council operates three libraries in the borough, at Guildford, Ash, and East Horsley. Shere Golden Diamond Jubilee library is a Community Partnered library, run by community volunteers. As outlined in the Infrastructure Baseline, we have been working with Surrey County Council on its plans to provide an expanded Guildford Library as part of a wider new community building, with other suitable uses.
- 8.2. Portsmouth Road surface car park was the preferred site for a new Guildford library proposed in the 2014 draft Local Plan. Further work on applying the Environment Agency's national flooding tests to sites in Guildford town centre (see Guildford SFRA Level 2) has resulted in sites at high probability of flooding and with no existing building footprint being excluded from Local Plan allocation. Unfortunately, no alternative site has been found that has high visibility and passing footfall, and would be suitable for a new community hub including a larger replacement library.

Cemeteries and crematoria

Lead agency	Guildford Borough CouncilParish CouncilsPrivate cemetery providers
Key reports and data	None

8.3. Council cemeteries and crematoria are generally managed by borough, district and parish councils. Providing burial land is a non-statutory service provided by the Council as well as parish councils and private companies.

Existing provision

- 8.4. Guildford Borough Council operates and maintains two cemeteries within the borough. The Mount Cemetery has been closed for new burials for a number of years. The only burials which occur there are burial of cremated remains or full burials in existing family graves.
- 8.5. Stoke New Cemetery and Stoke Old Cemetery, either side of Stoughton Road in the north west of Guildford is the borough's main cemetery. Stoke Cemetery is currently open for new burials. The cemetery is separated into a number of sections specifically for Church of England (lawn and traditional), Roman Catholic (lawn and traditional), Non-Conformist (lawn and traditional), Jewish (lawn) and children/ babies (lawn and traditional). There remains only

- very limited space for new Church of England burials. There is no provision for Muslim burials.
- 8.6. Stoke Old Cemetery is taking reopens only. Stoke New Cemetery is currently taking mainly reopens, but also has a small amount of burial space. This is the only cemetery in Guildford town with new grave space, but is nearing capacity. As noted in the baseline study parish churchyards only provide for parishioners.

Planned provision

- 8.7. Choice is needed for burials and cremations so that families can select the service based on their religious, location and other needs. The options available to the people of Guildford for burial are reducing. Whilst provision outside the Borough is a consideration (e.g. facilities in Eashing in Waverley), the sustainability and accessibility of these options in terms of serving the majority of Guildford's urban population is a concern.
- 8.8. In light of current availability and demographic demands, it is necessary to plan for additional cemetery provision during the plan period and beyond (approximately the next 50 years) to the order of one or two new cemetery sites, each between 2 and 2.4 hectares. Based on feasibility work undertaken, land north of Salt Box Road has been identified in the Infrastructure Schedule at BS1 and allocated in the Submission Local Plan (see Policy A23) for this purpose.

Community halls

Lead agency	Guildford Borough Council Parish Councils
Key reports and data	None

8.9. The increase in population over the local plan period is likely to require additional built community space. There is no agreed national standard for the provision of such space, although other authorities have used standards of between 61-69 sq. m per 1000 people. Provision at strategic sites will need to be considered. In this regard, the Infrastructure Schedule has included provision of community meeting halls at the three largest strategic sites (see Infrastructure Schedule at CMH1, 2 and 3).

Infrastructure Schedule

This Infrastructure Schedule sets out the key infrastructure requirements on which the delivery of the plan depends. It is not an exhaustive list of all infrastructure that will be provided or improved in the borough during the plan period.

This Schedule includes the key infrastructure needed to support the development planned, focussing particularly on the first five years of the plan period, and the infrastructure needed to support the strategic development sites. The schedule also includes some infrastructure projects needed to support smaller sites, which cumulatively could have an unacceptable impact without improved and new infrastructure.

We have worked with infrastructure delivery organisations, including Surrey County Council, Highways England, Network Rail, Thames Water and other water supply companies, and health providers, to produce this schedule of infrastructure known to be required to support the planned development in the Local Plan.

The Infrastructure Schedule forms part of the **Guildford Infrastructure Delivery Plan** (Guildford borough's IDP), The IDP, including the Infrastructure Schedule, will be revised from time to time, including during the Plan period, as and when further detail becomes available regarding infrastructure projects, their timing, and funding sources. Some of this detail will come from the investment plans of infrastructure providers.

Minor modifications, including to this Infrastructure Schedule, have been proposed as part of the submission of the Draft Local Plan as relevant documents to the Secretary of State. Should these be accepted, the Infrastructure Schedule will be updated accordingly.

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
1	Transport			
NR	Rail			
NR1	Guildford rail station capacity and interchange improvements	Between 2024 and post plan period	Network Rail	£100m Network Rail and developer funded
NR2	New rail station at Guildford West (Park Barn)	Between 2024 and 2029	Network Rail, Surrey County Council, Royal Surrey County Hospital, Guildford Borough Council and developer(s)	£10m Developer funded
NR3	New rail station at Guildford East (Merrow) (to principally serve Gosden Hill Farm site)	Between 2024 and 2029	Network Rail, Surrey County Council and developer	£10m Developer funded
NR4	Electrification of North Downs Line, facilitating increased service frequency	Between 2019 and 2029	Network Rail	£30m Network Rail
NR5	Portsmouth Direct Line improvements (together with South West Main Line Peak Demand improvements), facilitating increased service frequency	Between 2029 and post plan period	Network Rail	£5m Network Rail

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
NR6	North Downs Line (Great Western Railway) service frequency and timetable improvements	2017-2018	Network Rail and Great Western Railway	Budgeted for in Great Western Railway franchise
SRN	Strategic Road Network			
SRN1	Intentionally blank			
SRN2	A3 Guildford (A320 Stoke interchange junction to A31 Hog's Back junction) 'Road Investment Strategy' scheme (E31)	Between 2023 and 2027	Highways England	£100-250m Highways England and developer funded
SRN3	M25 Junction 10/A3 Wisley interchange 'Road Investment Strategy' scheme (E16)	Between 2019 and 2022	Highways England	£100-250m Highways England and developer funded
SRN4	New A3/A3100 Burpham junction with relocated A3 southbound off- slip and new A3 southbound on-slip (to principally serve Gosden Hill Farm site)	Between 2021 and 2023	Highways England and/or developer	£10m Developer funded
SRN5	M25 Junctions 10-16 'Road Investment Strategy' scheme (E15)	Between 2019 and 2022	Highways England	£100-250m Highways England
SRN6	Intentionally blank			
SRN7	A3 northbound off-slip lane widening at University Interchange (approaching Tesco roundabout) improvement scheme	Between 2018 and 2019	Highways England	Committed funding: Department for Transport £1.6m

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
SRN8	A3 southbound off-slip lane widening to A320 Stoke Interchange improvement scheme	Between 2018 and 2019	Highways England	Committed funding: Department for Transport £2.5m
SRN9	A3 northbound on-slip at A247 Clandon Road (Burnt Common)	Between 2021 and 2027	Highways England and/or developer	£10m Developer funded
SRN10	A3 southbound off-slip at A247 Clandon Road (Burnt Common)	Between 2021 and 2027	Highways England and/or developer	£10m Developer funded
LRN	Local Road Network			
LRN1	 Guildford Town Centre Transport Package Component schemes: Walnut Tree Close experimental closure scheme: experimental closure for up to 18 months to inform decision on a potential permanent closure Replacement Walnut Bridge scheme: a wider structure to cater for higher flows of pedestrians plus usage by cyclists Guildford College Link + scheme: a new pedestrian and cycle route linking Walnut Bridge (scheme 2) to Guildford College Millbrook car park junction improvement scheme: to remove requirement for exiting vehicles to circuit the Guildford gyratory A25 cycle corridor scheme: widening sections of this existing corridor to create a shared use path for pedestrians and cyclists up to 3m in width A25/A320 Stoke cross roads improvement scheme: improved provision for pedestrians and cyclists, bus priority, and reduced number of pedestrian and cyclist casualties 	2016/17– 2019/20, which encompasses the delivery of the various component schemes	Surrey County Council for highway schemes, Guildford Borough Council for replacement Walnut Bridge	£9.260m Committed funding package: Local Growth Fund £6.55m Guildford Borough Council £1.403m Developer funded £0.314m Surrey County Council £0.993m

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	A3100 London Road to Boxgrove roundabout corridor improvement scheme: bus stop facilities including RTPI and creating an off-road shared use path for pedestrians and cyclists up to 3m in width			
LRN2	A3/Egerton Road Tesco Roundabout improvement scheme	Between 2017 and 2026	Surrey County Council and/or Highways England	£5m Highways England and developer funded
LRN3	New signalised junction from Blackwell Farm site to A31 Farnham Road (to principally serve Blackwell Farm site)	Between 2021 and 2027	Developer	£5m Developer funded
LRN4	Access road at Blackwell Farm site with through link to Egerton Road (to principally serve Blackwell Farm site)	Between 2021 and 2027	Developer	£20m Developer funded
LRN5	Interventions to address potential highway performance issues resulting from development at Blackwell Farm site	Between 2021 and 2033	Highways England and/or developer	£5-10m Developer funded
LRN6	Interventions to address potential highway performance issues resulting from development at Gosden Hill Farm site	Between 2021 and 2033	Highways England and/or developer	£5-10m Developer funded
LRN7	Interventions to address potential highway performance issues resulting from development at Land at former Wisley airfield site. To include mitigation schemes to address issues: • on the A3 and M25 and at the M25 Junction 10/A3 Wisley interchange • on B2215 Ripley High Street • at the junctions of Ripley High Street with Newark Lane/Rose Lane	Between 2021 and 2033	Highways England and/or developer	£25m Developer funded

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	 at junction of Old Lane with A3 on-slip (Guildford bound) at junctions of Old Lane, Forest Road and Howard Road 			
LRN8	Interventions to address potential highway performance issues, including on A320 Woking Road, resulting from development at SARP site	Between 2023 and 2033	Highways England and/or developer	£5-10m Developer funded
LRN9	A323 Ash Road and Guildford Road (Ash) traffic management and environmental improvement scheme	Between 2018 and 2026	Surrey County Council	£1m Developer funded
LRN10	B3411 Ash Hill Road (Ash) traffic management and environmental improvement scheme	Between 2018 and 2026	Surrey County Council	£0.5m Developer funded
LRN11	B3411 Ash Hill Road/A323 Guildford Road (Ash) junction improvement scheme	Between 2017 and 2026	Surrey County Council	£0.5m Developer funded
LRN12	B3411 Ash Vale Road (Ash Vale) environmental improvement scheme	Between 2018 and 2026	Surrey County Council	£0.8m Developer funded
LRN13	A323 Aldershot Road/A331 Blackwater Valley Route (Ash) junction improvement scheme	Between 2018 and 2026	Surrey County Council	£2m Developer funded and Local Growth Fund
LRN14	A331 Blackwater Valley Route with A31 Hog's Back (Tongham) junction improvement scheme	Between 2018 and 2026	Surrey County Council	£0.5m Developer funded and Local Growth Fund
LRN15	The Street (Tongham) environmental improvement scheme	Between 2018 and 2026	Surrey County Council	£0.5m Developer funded
LRN16	A31 Hog's Back (Tongham to Puttenham) road safety scheme	Between 2018 and 2026	Surrey County Council	£2.5m Developer funded

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
LRN17	B3000 Puttenham Hill/A31 Hog's Back junction (Puttenham) improvement scheme	Between 2021 and 2026	Surrey County Council	£1m Developer funded
LRN18	Intentionally blank			
LRN19	Intentionally blank			
LRN20	A247 Send Road/Send Barns Lane (Send) traffic management and environmental improvement scheme	Between 2018 and 2026	Surrey County Council	£1.5m Developer funded
LRN21	New road bridge and footbridge scheme to enable level crossing closure on A323 Guildford Road adjacent to Ash railway station	Between 2018 and 2024	Surrey County Council	£15m Developer funded and Network Rail
LRN22	East Horsley and West Horsley traffic management and environmental improvement scheme	Between 2019 and 2023	Surrey County Council	£1m Developer funded
LRN23	A322 Onslow Street, Laundry Road, A322 Woodbridge Road and A246 York Road junctions improvement scheme involving new and modified signalised junctions	Between 2020 and 2025	Surrey County Council	£10m Developer funded
LRN24	A323 Guildford Road/A324 Pirbright Road junction improvement scheme	Between 2019 and 2025	Surrey County Council	£0.5m Developer funded
LRN25	A281 Horsham Road/A248 Kings Road/A248 Broadford Road junction improvement schemes	Between 2021 and 2023	Surrey County Council	£2.5-5m Developer funded
P&R	Park and Ride			
P&R1	Gosden Hill Farm Park and Ride (to principally mitigate traffic	Between 2021	Developer	£7.5m

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	impact of Gosden Hill Farm site)	and 2023		Developer funded
SMC	Sustainable Movement Corridor			
SMC1	Sustainable Movement Corridor: West	Between 2018 and 2033	Surrey County Council, Guildford Borough Council and developer(s)	£20m Developer funded and Local Growth Fund
SMC2	Sustainable Movement Corridor: Yorkie's Bridge	Between 2018 and 2033	Surrey County Council, Guildford Borough Council, Network Rail and developer(s)	£10m Developer funded and Local Growth Fund
SMC3	Sustainable Movement Corridor: Town Centre Phase 1	Between 2018 and 2022	Surrey County Council and Guildford Borough Council	£5-10m Developer funded and Local Growth Fund
SMC4	Sustainable Movement Corridor: Town Centre Phase 2	Between 2018 and 2033	Surrey County Council, Guildford Borough Council, Network Rail and developer(s)	£5-10m Developer funded and Local Growth Fund
SMC5	Sustainable Movement Corridor: North	Between 2018 and 2033	Surrey County Council, Guildford Borough Council and developer(s)	£20m Developer funded and Local Growth Fund
SMC6	Sustainable Movement Corridor: East	Between 2018	Surrey County	£20m

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
		and 2033	Council, Guildford Borough Council and developer	Developer funded and Local Growth Fund
вт	Bus Transport			
BT1	New Guildford town centre bus facilities	Between 2018 and 2022	Surrey County Council and/or Guildford Borough Council and/or developer(s)	£5-10m Developer funded
BT2	Bus interchange at Effingham Junction rail station (or alternatively Horsley rail station) (to principally serve Land at former Wisley airfield site)	Between 2021 and 2025	Developer	£0.25m Developer funded
ВТ3	Significant bus network serving the Land at former Wisley airfield site and key destinations including Effingham Junction railway station and/or Horsley railway station, Guildford and Cobham to be provided and secured in perpetuity	Between 2021 and 2022	Developer	To be confirmed Developer funded
BT4	Intentionally blank			
BT5	Significant bus network serving the Gosden Hill Farm site and key destinations including the existing eastern suburbs of Guildford and the town centre to be provided	Between 2021 and 2022	Developer	To be confirmed Developer funded
BT6	Significant bus network serving the Blackwell Farm site and key destinations including the existing western suburbs of Guildford and the town centre to be provided	Between 2021 and 2022	Developer	To be confirmed Developer funded

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
AM	Active Modes			
AM1	Guildford Wayfinding signage system – Phase 2	Between 2017 and 2033	Surrey County Council, Guildford Borough Council and developers	£0.22m Developer funded, Local Growth Fund and Surrey County Council
AM2	Comprehensive Guildford borough cycle network, excluding AM3	Between 2017 and post plan period, which encompasses the delivery of various component schemes	Surrey County Council, Guildford Borough Council and developers	£20m Developer funded, Local Growth Fund and Surrey County Council
AM3	Off site cycle network from the Land at former Wisley airfield site to key destinations including Effingham Junction railway station, Horsley railway station/Station Parade and Ripley, with improvements to a level that would be attractive and safe for the average cyclist	Between 2021 and 2025	Surrey County Council, Guildford Borough Council and developers	£6.5m Developer funded
2	Utilities			
EG	Electricity and gas distribution and supply			

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
EG1	UKPN RDP Asset replacement and reinforcements Summary from UKPN RDP Published electricity projects (asset replacement and reinforcements) UKPN SPN Regional Development Plan - Chessington / Laleham / West Weybridge - June 2015 Version 3	2015-2023	UKPN / SSE / Developers	£30m UK Power Networks (UKPN) / SSE, and developer funded
EG2	3753 - Guildford Grid 33 kV Switchgear Replacement – (FL) Required for 3 txf's in parallel (2016-2018) Replacement the existing 33kV switchgear with a new 13-breaker switchboard in order to increase the fault level from 17.5kA to 30kA. 5543 - Guildford Grid 132/33kV - ITC (2019 - 2022) Installation of a 3rd 132kV UGC circuit and addition of a third 132/33kV grid transformer for N-2 P2/6 compliance. 7886 - Guildford A 33kV/11kV - ITC (2016 - 2018) Replacement of T5 and T6 with new 2 x 12/40 MVA transformers. It is also proposed to replace 200m of DC 33kV underground cables from Guildford Grid with new 40MVA cables. 7887/8154 - Guildford B 11kV – ITC and Replacement of the 11kV switchboard for fault duty (2016 - 2017) Replacement of T1 and T2 with new 2 x 20/40 MVA transformer/s, replacing 200 m of DC 33kV underground cables with 40 MVA cable and replacement of a 17 panel 11kV switchboard. 8015 - Merrow 33kV/11kV Reinforcement - Third 12/24 MVA Transformer, 3 km of UGC Circuit & Replace 10 Panel SWB (2020-2022)	Years 1-5	UKPN	TBD

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	Installation of an additional 12/24 MVA transformer, 3 km of underground 33kV cable circuit from Guildford, and replacement of the existing 8 panel switchboard in order to increase winter firm capacity from 23MVA to 48MVA.			
	8037 - Guildford Grid 132kV Reinforcement for (N-2) - Installation of a 3rd 132kV circuit (Phase 1 Guildford to Effingham) (2015 - 2022) Installation of a third 132kV circuit from Leatherhead 132kV mesh to Guildford to supply a third 90MVA 132/33kV transformer at Guildford Grid for N-2 P2/6 compliance. This project is linked to project 5543 which will add a third 132/33kV transformer at Guildford (N-2).			
EG3	Upgrade electricity supply infrastructure should capacity assessment conclude it necessary, at Gosden Hill strategic site	Years 1-15	UKPN	Developer and UKPN funded
EG4	Upgrade electricity supply infrastructure should capacity assessment conclude it necessary, at Blackwell Farm strategic site	Years 1-15	UKPN	Developer and UKPN funded
EG5	Upgrade electricity supply infrastructure should capacity assessment conclude it necessary, at Wisley former airfield strategic sites	Years 1-15	UKPN	Developer and UKPN funded
EG6	Intentionally blank			
EG7	Upgrade electricity supply infrastructure should capacity assessment conclude it necessary, at Slyfield Regeneration site (SARP)	Years 1-15	UKPN	Developer and UKPN funded
WS	Water supply			

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
WS1	Upgrade to water supply network capacity to support the former Wisley airfield strategic site	Years 1-15	Affinity Water	Developer funded
WS2	Upgrade to capacity of water supply network if assessment shows it is needed to support Blackwell Farm strategic site	Years 1-15	Thames Water	Developer funded
WS3	Upgrade to capacity of water supply network if assessment shows it is needed to support Gosden Hill Farm strategic site	Years 1-15	Thames Water	Developer funded
WS4	Intentionally blank			
WS5	Upgrade to capacity of water supply network if assessment shows it is needed to support Slyfield Regeneration site	Years 1-15	Thames Water	Developer funded
WCT	Wastewater connections and treatment			
WCT1	Upgrade to the foul water network connections to the former Wisley airfield site to provide sufficient capacity	Years 1-15 Local network upgrades take about 18 months to deliver	Thames Water	Developer and Thames Water funded
WCT2	Upgrade of capacity at Ripley wastewater treatment works to serve increased flows from Wisley former airfield strategic site	Years 1-15	Thames Water	Developer and Thames Water funded
WCT3	Upgrade to wastewater infrastructure if assessment (at developer's cost) shows that additional capacity is needed to provide for Blackwell Farm strategic site.	Years 1-15	Thames Water	Developer and Thames Water funded

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	Details of scale and form of upgrades to wastewater infrastructure will be included once development areas are confirmed and developers have produced detailed drainage strategies			
WCT4	Upgrade to wastewater infrastructure if assessment (at developer's cost) shows that additional capacity is needed to provide for Gosden Hill	Years 1-15	Thames Water	Developer and Thames Water funded
WCT5	Intentionally blank			
WCT6	Relocation of Slyfield wastewater treatment works	2021	Thames Water	To be funded by the development
WCT7	Upgrading existing pumping station at Slyfield Slyfield Area Regeneration Project (SARP) site	Years 1-10	Thames Water	Developer and Thames Water funded
WCT8	Pipeline required between existing pumping station and the new site and potentially returning to discharge location at Slyfield Area Regeneration Project (SARP) site	Years 1-10	Thames Water	Developer and Thames Water funded
WCT9	Upgrade of capacity at Ash Vale wastewater treatment works to serve increased flows	Years 1 - 5	Thames Water	Developer and Thames Water funded
FRR	Flood risk reduction : surface water mitigation measures			
FRR1	Minimising surface water flood risk at the strategic site at Gosden Hill, to ensure that run-off after development does not exceed run-off rates from the site before development. Measures to include on-site Sustainable Urban Drainage System	Years 1-15	Developer	Developer funded

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	(SUD), including balancing pond(s), to provide for flooding water storage on the development site.			
FRR2	Minimising surface water flood risk at the strategic site at Blackwell Farm, to ensure that run-off after development does not exceed run-off rates from the site before development. Measures to include on-site Sustainable Urban Drainage System (SUD), including balancing pond(s), to provide for flooding water storage on the development site.	Years 1-15	Developer	Developer funded
FRR3	Minimising surface water flood risk at the strategic site at Wisley former airfield, to ensure that run-off after development does not exceed run-off rates from the site before development. Measures to include on-site Sustainable Urban Drainage System (SUD), including balancing pond(s), to provide for flooding water storage on the development site.	Years 1-15	Developer	Developer funded
3	Green Infrastructure			
SANG	Suitable Alternative Natural Green Space (SANG)			
SANG1	Strategic Suitable Alternative Natural Green Space (SANG) Effingham Common	Current	Guildford Borough Council	SANG remaining maintenance and management costs £8,969,000 plus interest Developer funded
SANG2	Strategic Suitable Alternative Natural Green Space (SANG)	Current	Guildford	SANG remaining

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	Chantry Woods, Pilgrim's Way, Holy Trinity		Borough Council	maintenance and management costs £8,717,561 plus interest Developer funded
SANG3	Strategic Suitable Alternative Natural Green Space (SANG) Riverside Park (including Parsonage Watermeadows), North Guildford	Current	Guildford Borough Council	SANG remaining capital, maintenance and management costs £1,205,065 plus interest Developer funded
SANG4	Strategic Suitable Alternative Natural Green Space (SANG) Tyting Farm, Halfpenny Lane, Holy Trinity	Years 1-5	Guildford Borough Council	SANG all capital, maintenance and management costs £12,265,300 plus interest Developer funded
SANG5	Strategic Suitable Alternative Natural Green Space (SANG) Burpham Court Farm, North Guildford	Years 1-5	Guildford Borough Council	SANG all capital, maintenance and management costs £6,132,650 plus interest Developer funded
SANG6	Strategic Suitable Alternative Natural Green Space (SANG) Russell Place Farm, Wood Street Village	Years 1-5	Landowner	SANG all capital, maintenance and management costs £10,229,260 plus interest Developer funded
SANG7	Strategic Suitable Alternative Natural Green Space (SANG) Ash, West of Ash Green	Years 1-5	Developer To be transferred	Developer to deliver initial stage, maintenance and

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
			to Guildford Borough Council to allocate to developments and to maintain	management of initial stage and delivery, maintenance and management of later stages to be developer funded. SANG all capital and management costs £7,359,180
SANG8	Strategic Suitable Alternative Natural Green Space (SANG) Land Adjacent to Long Reach, West Horsley	Years 1-5	Landowner	Delivery method TBD. SANG all capital, maintenance and management costs £7,573,822 Developer funded
SANG9	Bespoke Suitable Alternative Natural Green Space (SANG) Bens Wood, West Horsley	Years 1-5	Developer	Developer funded
SANG 10	Bespoke Suitable Alternative Natural Green Space (SANG) at Blackwell Farm site	Years 1-5	Developer	Developer funded
SANG 11	Bespoke Suitable Alternative Natural Green Space (SANG) Gosden Hill Farm	Years 1-5	Developer	Developer funded
SANG 12	Bespoke Suitable Alternative Natural Green Space (SANG) Former Wisley airfield	Years 1-5	Developer	Developer funded
os	Open Space			

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
OS1	Open space including park, playground, and playing fields at Gosden Hill Farm strategic site	Years 1-15	Developer	Developer funded
OS2	Open space including park, playground, and playing fields, at Blackwell Farm strategic site	Years 1-15	Developer	Developer funded
OS3	Open space including park, playground, and playing fields at Former Wisley Airfield strategic site	Years 1-15	Developer	Developer funded
OS4	Intentionally blank			
OS5	Bellfields allotments relocated to Clay Lane	Years 1-5	Guildford Borough Council	GBC
OS6	New allotments on land north east of Spoil Road, Tongham	Years 1-5	Developer; to be vested to Parish Council	Developer funded
4	Education			
EYED	Early Years			
EYED1	Intentionally blank			

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
EYED2	Early years provision on strategic sites, to meet identified needs	Years 1-15	Private developer	Developer funded
PED	Primary Schools			
PED1	Intentionally blank			
PED2	A new two-form entry primary school with pre-school provision at the Former Wisley Airfield site to serve new housing on the site	Years 1-15	An academy trust	Developer to provide serviced land and build costs Construction cost = £8m
PED3	A new two-form entry primary school with pre-school provision at Gosden Hill Farm to serve new housing on the site	Years 1-15	An academy trust	Developer to provide serviced land and build costs Construction cost = £8m
PED4	A new two-form entry primary school with pre-school provision at Blackwell Farm to serve new housing on the site	Years 1-15	An academy trust	Developer to provide serviced land and build costs Construction cost = £8m
PED5	Appropriate financial contribution to enable expansion of Weyfield Primary Academy by additional 1FE – 2FE with pre-school provision at Slyfield regeneration site (SARP) to serve the new housing on site	Years 1-15	An academy trust	Developer funded
PED6	(Potential) expansion of Ash Grange Primary School by additional 1FE - 2FE (if required to provide spaces for children who will live in	Years 1-10	A community / maintained	Developer funded

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	the homes south and east of Ash and Tongham)		school	
PED7	Up to an additional 3FE in Guildford Town; SCC currently in discussions with existing schools	Years 1-5	Existing schools and an academy trust	Developer funded
SED	Secondary Schools			
SED1	A minimum 4-form entry (4FE) secondary school at Gosden Hill Farm strategic development site. To be located a short walk from the proposed Park and Ride. 2FE of the school would be needed to serve the strategic development site itself, and the remainder will serve new housing development in the wider area. Secondary school place needs will be re-assessed at the time a planning application is determined at which time any recent new secondary school provision will be taken into account to ascertain needs at the time.	TBD	An academy trust	Developer to provide serviced land at nil cost and transfer it to SCC £15 build costs –developer funded
SED2	A 4FE secondary school at the former Wisley airfield 2FE of the school is needed to serve the strategic development site itself, and the remainder will serve new housing development in the wider area. Secondary school place needs will be re-assessed at the time a planning application is determined at which time any recent new secondary school provision will be taken into account to ascertain needs at the time.	TBD	An academy trust	Developer to provide serviced land at nil cost and transfer it to SCC £15m build costs – developer funded
SED3	A 6FE secondary school at Blackwell Farm strategic development	TBD	An academy trust	Developer to provide

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
	site. To be located to the north of the site.			serviced land at nil cost and transfer it to SCC
	2FE would be needed to serve the strategic development site itself, and the remainder will serve new housing development in the wider area. Secondary school place needs will be re-assessed at the time a planning application is determined at which time any recent new secondary school provision will be taken into account to ascertain needs at the time.			£20m build costs – developer funded
SED4	Intentionally blank			
SED5	Expansion of Ash Manor Secondary School by additional 1FE to provide spaces for children who will live around Ash and Tongham	TBD	An academy trust	Developer funded
5	Emergency Services			
ES	Police			
ES1	Neighbourhood Policing Centre (30 sq. m plus 2 parking spaces) on-site at Former Wisley Airfield site	5-15	Surrey Police	£100K Developer funded
ES2	A new ambulance community response post and a Make Ready Centre (MRC) at the existing ambulance station at The Street, Tongham (immediately north of the A31 Runfold Diversion).	1-5	SE Coast Ambulance NHS Foundation Trust (SECAmb)	TBC

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
6	Health and Social Care			
HSC	GPs and Dental surgeries: Primary Health Care			
HSC1	Park Barn Surgery and Community Centre: Replacement of the Oaks Medical Centre with a new health centre on the former Pond Meadow school site. New facilities to provide GPs practice, dental surgery and pharmacy. On the same site, and potentially within the same building, a Community Centre with Youth Facilities.	1-5	GP Practice / Guildford Waverley CCG	£5.5m, of which£1.5m is capital receipt from selling part of site for housing
HSC2	Land and a new building for a new GPs practice surgery at Gosden Hill strategic site	1-15 years	Developer / Guildford Waverley CCG	Serviced land at nil cost to be provided by the developer CCG or a local GPs Practice to fund
HSC3	Expansion of existing GPs Practices in Guildown Group Practice to provide additional capacity for residents of Blackwell Farm strategic site or land and a new building for a new GPs practice surgery at Blackwell Farm strategic site	1-15 years	Developer / Guildford Waverley CCG	CCG or a local GPs Practice and developer funded
HSC4	GPs surgery with pharmacy at the Former Wisley airfield site	1-15 years	Developer / Guildford Waverley CCG	Serviced land at nil cost to be provided by the developer

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
				CCG or a local GPs Practice to fund
HSC5	Expansion of East Horsley Medical Centre to provide additional capacity and services for future population	5-15	GP Practice	Guildford Waverley CCG / developer funded
HSC6	Expansion of existing GP provision in the area to provide additional capacity for residents of the Ash and Tongham strategic location for development or land and a new building for a new GPs practice surgery at the Ash and Tongham strategic location for development	1-15	Developer / Surrey Heath CCG	Surrey Heath CCG / developer funded
7	Community Facilities			
BS	Burial Space			
BS1	New burial ground at Salt Box Road, by Whitmoor Common and the railway line.	6-15 years	Guildford Borough Council	Guildford Borough Council
СМН	Community Meeting Halls			
CMH1	Community meeting hall at Blackwell Farm strategic site (Use Class D1)	1-15 years	TBD	Developer funded
CMH2	Community meeting hall at Gosden Hill Farm strategic site (Use Class D1)	1-15 years	TBD	Developer funded
CMH3	Community meeting hall at the former Wisley airfield strategic site (Use Class D1)	1-15 years	TBD	Developer funded

	Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
8	Waste transfer facility, and other waste and work	s infrastruct	ure	
SARP1	New Surrey County Council waste transfer station in the Slyfield industrial estate (in different location to existing, to replace the existing)	1-5 years	Surrey County Council	SARP is designated as a "Housing Zone" by the Homes and Communities Agency. As part of this designation, £90m loan funding could be made available from the Public Works Loan Board. This would be repaid by the developer.
SARP2	New Community Recycling Centre (CRC)	1-5 years	Surrey County Council	SARP is designated as a "Housing Zone" by the Homes and Communities Agency. As part of this designation, £90m loan funding could be made available from the Public Works Loan Board. This would be repaid by the developer.
SARP3	New works depot for Guildford Borough Council	1-5 years	Guildford Borough Council	SARP is designated as a "Housing Zone" by the Homes and Communities Agency. As part of this designation, £90m loan funding could be made

Infrastructure Type Infrastructure Project	Delivered when	Delivered by	Likely cost (where known) and funding source
			available from the Public Works Loan Board. This would be repaid by the developer.