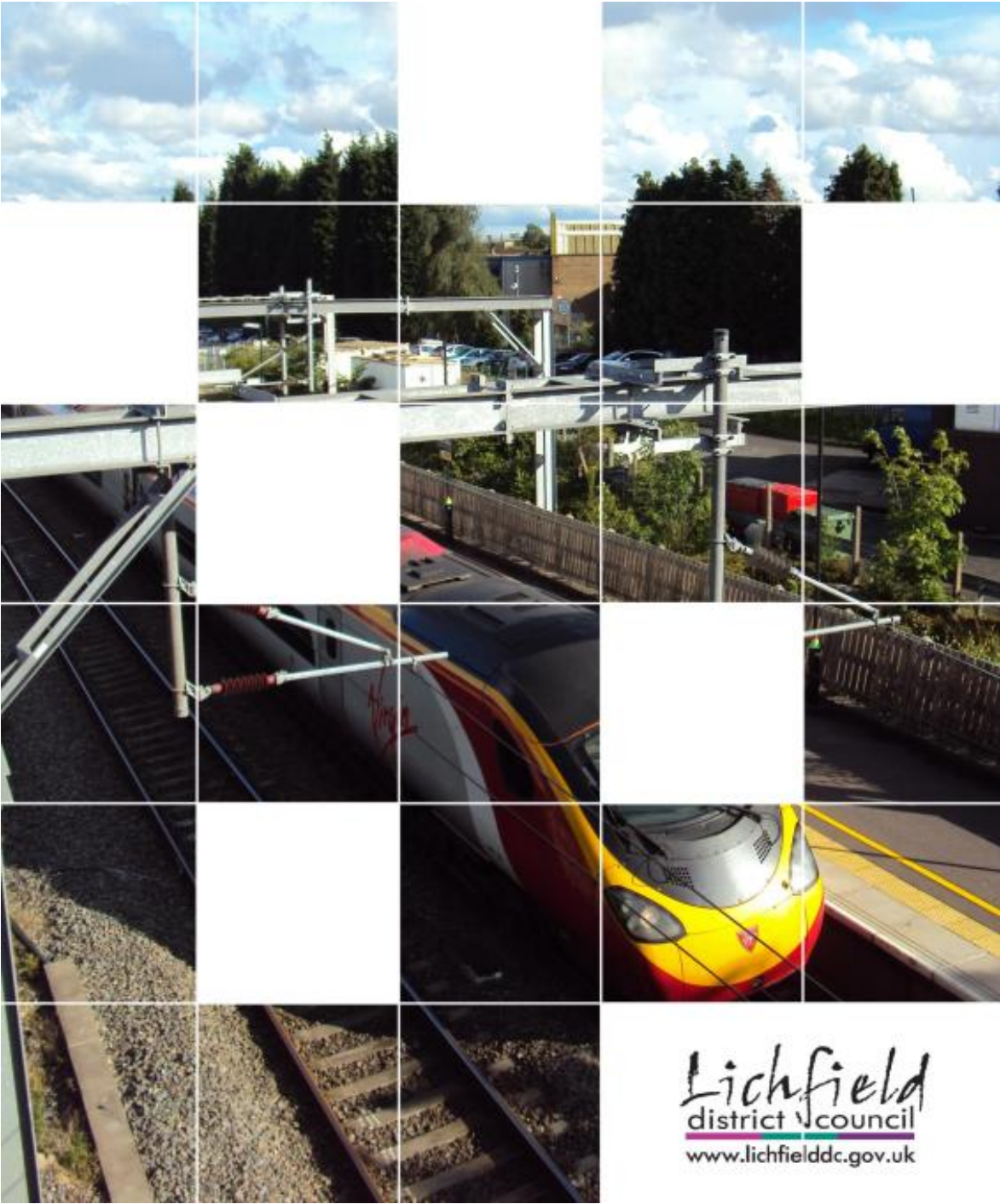


Infrastructure Delivery Plan



Lichfield
district council
www.lichfielddc.gov.uk

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1 Introduction

1.1 Infrastructure Planning is an essential element in ensuring that the Local Plan Strategy and Local Plan Allocation Document is robust and deliverable.

1.2 The term infrastructure is broadly used for planning purposes to define all of the requirements that are needed to make places function efficiently and effectively and in a way that creates sustainable communities. Infrastructure is commonly split into three main categories, defined as:

- **Physical:** the broad collection of systems and facilities that house and transport people and goods, and provide services e.g. transportation networks, housing, energy supplies, water, drainage and waste provision, ICT networks, public realm and historic legacy.
- **Green:** the physical environment within and between our cities, towns and villages. A network of multi-functional open spaces, including formal parks, gardens, woodland, green corridors, waterways, street trees and open countryside.
- **Social & Community:** the range of activities, organisations and facilities supporting the formation, development and maintenance of social relationships in a community. It can include the provision of community facilities (education, healthcare, community centres, places of worship, sports and leisure facilities), local networks, community groups, small scale funding to assist local projects, skills development and volunteering.

1.3 In general, infrastructure requirements can also be divided into strategic and local:

- **Strategic infrastructure** refers to facilities or services serving a wide area that may relate to part of the District, the whole District or beyond - for example improvements to trunk roads or investment in water, sewerage, gas and electricity networks. It may be needed where broader strategies are required to accommodate the cumulative impacts of growth, for example in a sub-region, rather than simply to accommodate the needs of the development proposals of a particular town or village.
- **Local infrastructure** is about facilities or services that are essential in meeting day-to-day needs of the population - for example schools, affordable housing, community facilities and local green spaces or measures to mitigate the impact of development at the site or neighbourhood level.

1.4 Improvements to infrastructure will be fundamental to achieving our ambitions for shaping the District to 2029. In addition they are considered necessary to deal with existing deficiencies and to cater for a growing and changing population. It is recognised that any proposed growth within Lichfield District must be supported by improvements to physical, social and green infrastructure, and where necessary, be delivered in advance of development. This infrastructure will include facilities needed for development to function and to ensure the integration and creation of sustainable communities.

1.5 It should be recognised that the delivery of the full range of infrastructure needs of existing and new communities is dependent on partnership working between a variety of public, private and voluntary sector agencies. Where new development creates a need for new or improved infrastructure, contributions from developers will be sought to make the development acceptable in planning terms. This is covered in Chapter 3: Funding and Delivery.

1.6 The Local Plan Strategy sets out in broad strategic terms where development will be located until 2029. It is a 'spatial' plan, meaning that it will help to deliver a vision for the area which takes account of the District's needs, ambitions and challenges. The Local Plan Strategy will be supported by a number of documents which are more locally specific such as the Local Plan Allocations Document and Neighbourhood and Parish Plans where these have been produced by local communities.

1.7 The Local Plan Strategy must be capable of being delivered to agreed timescales in a way which addresses the vision, meets the needs and aspirations of the local community as well as providing for more strategic needs. In order to do this, developments must be supported by the appropriate infrastructure, which can range from improvements to road networks to the provision of a new school or community centre.

1.8 The IDP is a 'living' document which is subject to ongoing change and revision as matters progress, its impact has been tracked annually for its effectiveness through the Authority Monitoring Review (AMR) and updated accordingly.

1.9 The engagement process for infrastructure requirements within Lichfield District commenced in 2009 with a wide range of stakeholders (over 300 invited in total) discussing topics that covered environmental, social, community and physical issues. This was supported by a series of individual stakeholder follow-up meetings. A draft IDP was consulted on as part of the 'Shaping our District' informal consultation stage from November 2010 - February 2011 and comments received were taken into account in formulating the IDP which accompanied the Local Plan Strategy proposed submission document which was published in July 2012 and subsequently submitted to the Secretary of State in March 2013. The Local Plan Strategy was found sound in January 2015 and adopted on the 17th February 2015.

1.10 The IDP was last reviewed early 2015, the update was published in August 2015. The document formed part of the evidence base that supported the Community Infrastructure Levy (CIL) Draft Charging Schedule through examination. Engagement and collaboration with stakeholders has continued and in some cases focus groups have been established to enable informed dialogue around need and delivery.

1.11 The latest review of the IDP (2017) has been undertaken to reflect the District Councils adoption of their Community Infrastructure Levy Charging Schedule and also ensure the document is able to robustly support the development of the emerging Local Plan Part 2 Allocations Document.

2 Policy Context

National Policy

2.1 The production of an Infrastructure Delivery Plan (IDP) is an essential part of the evidence base in developing and delivering a sound Local Plan Strategy and Local Plan Part 2 Allocations Document.

2.2 The National Planning Policy Framework (NPPF) states that *local planning authorities should work with other authorities and providers to:*

- *Assess the quality and capacity of infrastructure for transport, water supply, waste water and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands; and*
- *Take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.*

2.3 The NPPF also places considerable emphasis upon viability and ensuring that the cumulative impact of proposals and policies 'should not put implementation of the plan at serious risk, and should facilitate development through the economic cycle'. Viability assessment is a key element of evidence relating to the delivery of infrastructure to support the delivery of the Local Plan Strategy vision.

Local Policy

2.4 The Local Plan Strategy and the Local Plan Allocations Document will align with, and deliver, relevant elements of the Sustainable Community Strategy for Staffordshire (SCS). The County-wide document 'Our County, Our Vision: A Sustainable Community Strategy for Staffordshire 2008 - 2023' which has the following priorities:

- A vibrant, prosperous and sustainable economy.
- Strong, safe and cohesive communities.
- Improved health and sense of well being.
- A protected, enhanced and respected environment.

2.5 At the District level, the Strategic Plan 2016-2020 sets out the vision for the District. The plan was put together with the input of Councillors, officers, stakeholders (including business, community and voluntary sector) and local residents. The Strategic Plan 2016-2020 has the following priorities:

1. Vibrant and prosperous economy:
2. Healthy and Safe Communities:
3. Clean, green and welcoming places to live
4. A Council that is fit for the future

2.6 There is a cross over with Partners involved in developing the Strategic Plan for Lichfield District and those previously involved in the formulation of the IDP thus ensuring coordination between evidenced specific key priorities and capital infrastructure needs.

Local Plan Strategy: Strategic Priorities

2.7 The Local Plan Strategy has 15 Strategic Priorities. Strategic Priority 3: Infrastructure reads as follows: *'To provide the necessary infrastructure to support new and existing communities, including regeneration initiatives in those existing communities where the need for improvements to social, community and environmental infrastructure have been identified, in particular within north Lichfield, Burntwood, Fazeley and Armitage with Handsacre.'*

2.8 The IDP is relevant to delivering of all 15 strategic priorities. They can be found in full in the Lichfield District Local Plan Strategy, but in summary they are as follows:

1. Sustainable Communities	6. Economic Prosperity	11. Countryside Character
2. Climate Change	7. Employment Opportunities	12. Rural Communities
3. Infrastructure	8. Centres	13. Natural Resources
4. Sustainable Transport	9. Tourism	14. Built Environment
5. Meeting Housing Needs	10. Healthy & Safe Lifestyles	15. High Quality Development

Local Plan Strategy: The Spatial Strategy

2.9 The Spatial Strategy sets out the overall approach for the distribution of development in the District up until 2029 and the issues that need to be addressed when development takes place. The Spatial Strategy is set out in Core Policy 1 (CP1) of the Local Plan Strategy, and one of the key principles of this is to maximise the use of existing infrastructure and facilities to make the best use of what is already there, upgrading where this is required by the impacts of development, and investing in new facilities where necessary.

2.10 Core Policy 4 (CP4): Delivering our Infrastructure sets out the need to ensure that new development is supported by the required infrastructure at an appropriate stage linked to the phasing of development, and also relates to the protection and enhancement of key services and facilities as well as coordinating and funding delivery in partnership with a range of key stakeholders and partners.

2.11 Policy IP1: Supporting and Providing our Infrastructure is a Development Management policy which will ensure infrastructure needs are considered and delivered through the planning application process.

2.12 The following elements of strategic infrastructure are deemed essential to the delivery of the Local Plan Strategy:

- Completion of the Lichfield Southern Bypass

- Delivery of improvements to the strategic highway network as identified by the Highways Agency;
- Lichfield City centre improvements including Friarsgate and associated transport improvements;
- Delivery of a town centre for Burntwood;
- Upgrades to water supply and waste water facilities as agreed directly between the water companies and developers
- Delivery of primary and secondary education to serve projected need.
- Delivery of improved indoor sports provision to serve Lichfield City and its hinterland
- Mitigation for the impacts of development upon the Cannock Chase Special Area of Conservation (SAC)
- Mitigation for the impacts of development upon the River Mease Special area of Conservation (SAC).

2.13 Details relating to delivery progress for these infrastructure elements can be found in the Strategic Infrastructure section. The Local Infrastructure section also sets out essential site-specific needs.

Allocations Document:

2.14 The Local Plan Allocations Document will provide detail in relation to the strategic policies contained within the adopted Local Plan Strategy and enabling the delivery of a number of requirements which are not wholly met by the allocations designated within the Local Plan Strategy.

2.15 The Allocations document is intended to include:

- Proposed employment and housing allocations.
- Policy on Lichfield City Centre including demarcating primary and secondary retail frontages.
- Policy on Burntwood Town Centre.
- Policy on accommodating the needs of Gypsy, Traveller and Travelling Show people.
- A review of previously saved policies emanating from the previous Lichfield District Local Plan June 1998.

2.16 Development identified through the Local Plan Allocations process will need to be supported by the required infrastructure at the appropriate phase of delivery. Amendments to previously identified infrastructure requirements and additional infrastructure need have been included within this (2017) review of the IDP.

3 Funding & Delivery

Funding

3.1 Infrastructure requirements will be funded by a variety of different mechanisms which will vary over the plan period. The following chapters set out infrastructure needs and indicate potential sources of funding for each where this is possible, based upon appropriate available evidence, together with timescales for the phasing of delivery.

3.2 The key sources of funding over which the planning system can have a direct influence are as follows.

Community Infrastructure Levy

The Community infrastructure Levy (CIL) is a planning charge introduced by the Planning Act 2008 as a tool for local authorities in England and Wales to help deliver infrastructure to support the sustainable development of an area.

Section 106 Agreements

Following the introduction of CIL planning obligations made under Section 106 of the Town and Country Planning Act 1990 are limited to those matters that are directly related to a specific site, and which accord with Regulation 122, i.e. The obligation is necessary to make the development acceptable in planning terms, directly related to the development and fairly and reasonable related in scale and kind to the development. This may include requirements which are not capable of being funded through CIL such as affordable housing. In addition, from April 2015 any specific project or type of infrastructure will only be eligible to for funding from five or fewer section 106 obligations applied retrospectively from April 2010.

Planning Conditions

These are the main mechanisms for the provision of essential on-site design requirements and critical infrastructure. These could include highway infrastructure agreements, mainly those covered by Section 38 and Section 278 of the Highways Act 1980 which provide discretionary powers for the highway authority to enter into an agreement with a development to adopt a new highway or improve the existing highway.

Explanation

3.3 Developer contributions for the delivery of infrastructure to support new development have traditionally been secured primarily through the use of Section 106 obligations⁽ⁱ⁾. While raising significant funds locally for many projects, there have been a number of ongoing criticisms of Section 106 funding nationally including lack of transparency, the time taken to negotiate Section 106 Planning Obligations and the deliverability of obligations post their signing.

3.4 To address these concerns, Part 11 of the Planning Act 2008 provided for the introduction of the Community Infrastructure Levy (CIL), a simplified, transparent and less bureaucratic tariff-based system intended to apply to defined types of development. The ability to take forward CIL came into force on 6 April 2010 through the Community Infrastructure Levy Regulations 2010 (subsequently amended by the Community Infrastructure Levy (Amendment) Regulations 2011). Additional guidance was issued in December 2012 and further amendments were made in April 2013 and February 2014.

3.5 CIL is discretionary but allows Local Authorities who resolve to use the legislation to raise funds from developers undertaking new building projects in their area to deliver the necessary infrastructure arising as a consequence of new development.

3.6 The CIL Charging Schedule sets out the rate of levy that authority will charge those types of development that are eligible to contribute toward infrastructure provision. Lichfield District Council adopted its Community Infrastructure Levy Charging Schedule on the 19th April 2016 and commence charging the levy on the 13th June 2016. A raft of policies were also adopted to support the implementation of CIL including;

- CIL Instalments Policy
- CIL Guidance to Discretionary Relief, Social Housing Relief, Charitable Relief and Exemption,
- Payment in Kind Policy

Regulation 123

3.7 CIL income from new development (after allowing for Parish Council meaningful proportion and administration) can be spent on items that constitute "infrastructure" as defined by Regulation 216 of the 2008 Planning Act and the CIL Regulations 2010 (as amended). As part of the administration of CIL, Regulation 123 of the Community Infrastructure Levy Regulations 2010 (as amended) sets out the requirement for the CIL Charging Authority to publish a list of the infrastructure which may in whole or part be funded through the CIL. This list prevents double funding, as items on this list cannot be funded through S106 agreements. The District Council adopted the first version of the Regulation 123 list on the 19th April 2016 to coincide with the adoption of the CIL Charging Schedule a revised Regulation 123 list was adopted in early 2017.

i Section 106 of the Town and Country Planning Act 1990

3.8 CIL cannot be expected to pay for all the infrastructure required, but it is expected to make a significant contribution. Through the CIL administration process the District Council will prioritise which elements of infrastructure should benefit from CIL income and the level of that intervention. To support this process the District Council developed Governance arrangements for the allocation of CIL income which were adopted in July 2016. It is intended that that organisations/authorities with projects on the R123 list will bid for the release of funds from a centralised pot via a formal application process. The onus will be on applicants to produce strong evidence based arguments, which will include clear delivery plans for proposed projects along with potential and secured match funding information.

Developer Contributions Supplementary Planning Document

3.9 The Developer Contributions Supplementary Planning Document (SPD) was adopted by the District Council in May 2016. The SPD has been written to support the District following the adoption of the CIL Charging Schedule and clearly identifies the role of S106 in relation to a number of infrastructure requirements. The document also provides further context and guidance in regard to the matter of viability and goes on to outline the mechanisms available through the decision taking element of planning.

Other funding

3.10 Not all infrastructure will be able to be funded via the aforementioned mechanisms. There will be other sources of funding available over the plan the range of options will depend upon on the infrastructure requirements and could include public and private sector investment, grant funding (eg Lottery funding) and economic growth funding.

3.11 The District Council is a member of Greater Birmingham and Solihull Local Enterprise Partnership and the Stoke and Staffordshire Local Enterprise Partnership. Local enterprise partnerships are partnerships between local authorities and businesses. They decide what the priorities should be for investment in road, buildings and facilities in an area. With the support of the Homes and Communities Agency Local Enterprise Partnerships are able to access investment to support infrastructure developments through the Regional Growth Fund and the Growing Places Fund. Specifically the Growing Places Fund supports infrastructure projects that are designed to unlock wider economic growth, create jobs and build houses in England.

3.12 Throughout the plan period sources and levels of funding will vary and could relate to different themes and these will have to be match with locally raised revenues to the best effect. It is therefore one of the key roles of the IDP to set out clear requirements as to delivery timescale in relation to development phases, and details regarding funding based on the best available evidence.

3.13 To enable One of the key roles of the IDP is to set out clear requirements as to infrastructure need, delivery timescales in relation to development trajectories, and details regarding funding based on the the best available evidence.

4 Strategic Infrastructure

4.1 In order to deliver the Local Plan, infrastructure will need to be provided which serves more than one community or development site, and which can address the cumulative impacts of development across the District or beyond.

4.2 This chapter sets out the strategic infrastructure needs as identified through the Local Plan evidence base and through extensive consultation with stakeholders, infrastructure providers and local communities. It deals with strategic infrastructure in two ways: it includes specific pieces of infrastructure which can be costed in line with appropriate available evidence such as a leisure centre or improvements to a road junction and with more generic strategic needs such as the principle of investing in Green Infrastructure to improve connections and linkages across the District. This will comprise of a number of smaller varied projects the details of which will develop throughout the plan period and as such are costed on an individual basis at this stage, although a number of cost schemes have been included where this is appropriate and evidence has been provided.

4.3 Strategic physical, green, social and community infrastructure details are set out in the following paragraphs and summarised in tables at the end of each section.

Strategic Physical Infrastructure

Transport

4.4 Improvements to transport infrastructure are classed as physical infrastructure, although there will be elements which link with Green Infrastructure such as walkways, canals and cycle routes.

4.5 The Sustainable Transport chapter of the Local Plan Strategy sets out details for determining the strategic priorities in relation to achieving increasing levels of sustainable travel over the plan period. Lichfield District Integrated Transport Strategy 2013 - 2029 sets out the specific local detail. In addition, specific transport packages have been developed for Lichfield City Centre, South Lichfield, East Lichfield (including Fradely) and Burntwood.

4.6 This IDP should be read in conjunction with the Lichfield District Integrated Transport Strategy (**Appendix A**). Key elements have been summarised below and where appropriate additional updates added.

Lichfield City Centre Local Transport Package

The Lichfield City Local Transport Package focuses on supporting the Friarsgate redevelopment scheme which is a retail-led mixed use scheme, including new leisure and tourism facilities, and adequate parking. The traffic impact of office development, which is also expected to be focused on Lichfield City, will also need to be accommodated with sustainable transport links as appropriate. There are aspirations to expand the pedestrianised areas in the City. Variable Message Signs are also proposed to improve the flow of traffic around the City and to car parks.

Developers of Friarsgate will be required to contribute towards transport mitigation along the A5127. This includes urban traffic control and modifications to Birmingham Road/Rotten Row, Birmingham Road/St John Street, and Gresley Row/Tamworth Street junctions to improve safety and capacity where appropriate. Evidence from traffic modelling work also suggests that capacity improvements may be required at the Friary / A51 / A5127 / Sainte Foy Avenue junction.

Bus / rail integration will be provided as part of the Friarsgate development through the provision of a new bus station closer to Lichfield City rail station together with upgraded crossing facilities. It is expected that the new bus station will include enhanced bus information and will operate more efficiently than the existing one allowing more services to operate from it.

Burntwood Local Transport Package

The Burntwood Local Transport Package has been drawn up to help rejuvenate Burntwood by supporting an enhanced town centre, employment growth at Burntwood Business Park and housing growth east of the bypass. These measures include bus access improvements and increased service frequency, improved sustainable transport links across the urban area and into Chasewater, a new bus interchange facility and public realm improvements in the main retail area, specifically Sankey's Corner. The retail/leisure offer is dependent upon private sector investment and developer contributions are required to fund the Local Transport Package. There is also a long term aspiration for a new rail station at Burntwood if the Walsall to Lichfield line is opened to passenger trains.

South Lichfield Local Transport Package

The South Lichfield Local Transport Package includes key strategic road infrastructure that is expected to be completed to support the delivery of the emerging Lichfield District Local Plan, together with complementary sustainable transport measures to improve connectivity between the Strategic Development Allocation and the City centre. There are proposals to improve pedestrian safety, provide new cycle links connecting new development to the existing cycle network and improved bus connectivity. Highways England proposals will also be delivered as appropriate.

The Lichfield Southern Bypass provides a link between the A5206 London Road and the A461 Walsall Road. Phases 1 and 2 of the bypass have already been completed by developers with Phase 2 opening to traffic in 2010. Phase 3 between London Road and Birmingham Road is not required to deliver the Strategic Development Allocation but is expected to be funded by a combination of existing developer funds, public funds and contributions from future development. The County Council is commissioning design work and a construction cost estimate for the section of Phase 3 that crosses the railway line and links to Birmingham Road. Rail possessions are proposed in December 2019 with the new underbridge open in 2020. The delivery of the section of the bypass between the new underbridge and the A5206 London road will be aligned to the development trajectory for the South Lichfield SDA.

It is expected that the bypass will reduce traffic in the City centre on A5127 Birmingham Road and A51 Upper St John Street, protecting the historic core and facilitating regeneration proposals. It will also improve access to the Darwin Park and Sandfields residential areas and the South Lichfield Strategic Development Allocation. There will be reduced traffic levels on Shortbutts Lane as a result of the bypass although evidence from traffic modelling work identifies that a junction improvement will be required at Tamworth Road/Upper St John Street/ Shortbutts Lane/London Road as part of the construction of the bypass, to cater for the current forecast 2028 traffic flows. However the exact form of the junction is yet to be determined. Once the bypass is completed, a review of local traffic routing and directional signing will be undertaken.

East Lichfield Local Transport Package (including Fradley)

The East Lichfield Local Transport Package helps support the delivery of Strategic Development Allocations East of Lichfield (north of Streethay) and Fradley.

A5127 corridor improvements will be provided to help mitigate development in the East of Lichfield including urban traffic control, bus enhancements, cycle links and safe crossing points in Streethay to local amenities. There will be the requirement for an improvement at A5127/Eastern Avenue/Cappers Lane junction.

The package includes proposals for a Lichfield Trent Valley rail station gateway refurbishment. Lichfield Trent Valley station has recently received a new ticket office and waiting facilities. Improvements have also delivered increased car parking capacity (an additional 125 spaces). Further improvements are expected, including disabled access to the Cross City and London bound platforms, and further access upgrades and enhanced passenger information during 2017 following the allocation of Access funding. The County Council will continue to work in partnership with London Midland, the station facility operator, and Network Rail to explore all funding opportunities.

The traffic impact of the Strategic Development Allocation at Fradley will be reduced by providing adequate local neighbourhood facilities, new or extended bus services to Lichfield City centre with increased frequency, integration of the development with existing communities and local walking and cycling links. Safer access to the A38(T) is desired by the local community where there are currently sub-standard junction layouts and active traffic management may also be required along the A38(T). Managing the routing of Heavy Commercial Vehicles is essential and the provision of a lorry park is desirable.

Road improvements to address strategic / cumulative impacts

4.7 Lichfield Southern Bypass: it should be noted that the objective of the Lichfield Southern Bypass is to improve access to new housing (although the Strategic Housing Allocations to the south of Lichfield are not wholly dependent upon this in terms of ensuring access to the sites) and to improve the success of City Centre regeneration schemes by removing through-traffic especially from Birmingham Road. The cost of the bypass will be £21.2m which includes works needed to provide an underbridge in relation to the Cross-City rail line. The section of the bypass relating to Birmingham Road to Shorbutts Lane reference Phases 4a, and Shortbutts Lane to London Road reference Phases 4b will be delivered as site access improvements by the developer.

4.8 Junction improvements. The County Council identify four highway schemes to address cumulative growth relating to development in and around Lichfield City: the following junctions are projected to exhibit over-capacity results of 100%+ and, with the exception of the first scheme on the list, will be delivered as part of development schemes directly in relation to the following planning applications:

- Sainte Foy Avenue / A5127 / The Friary;

- A5127 / Eastern Avenue / Cappers Lane / Valley lane;
- St. John Street / A5127 / Upper St John Street;
- A5206 London Road / Shortbutts Lane / Upper St John Street / Tamworth Road (improvement scheme has been developed).

4.9 The County Council also identified the potential for upgrading the Tesco traffic light junction as part of wider mitigation measures associated with the Friarsgate Redevelopment Scheme however further details are not available at present.

4.10 Improvements to the Strategic Highway Network: Highways England has identified the following issues relating to the A38:

- **Streethay:** no predicted capacity issues, but the proximity of proposed development to the A38 slip road necessitates some form of control and balancing of traffic flows. In principle the Highways England supports the concept of a signalised access to the proposed site from the A5127 Burton Road;
- **Fradley:** there are capacity concerns along the A38(T). Attention also needs to be given to safety issues given the sub-standard layout of the Fradley South and Hilliards Cross junctions. A developer-led scheme will produce minor improvements to the Hilliards Cross junction. However, if further development proposals in this area are likely to require more significant improvement works in the future.
- **Muckley Corner, Wall Island and Swinfen:** A pinch Point scheme addressed capacity issues at Wall Island during 2004. Further work will be completed to develop improvements which focus on addressing capacity issues at Muckley Corner and Swinfen.

4.11 Highway England is in the process of producing its second round of Route Strategies. These will investigate and develop priorities to be taken forward into the next Roads Investment Strategy (RIS2). The majority of Government funding for improvement schemes is likely to be allocated through the RIS2 process. Capacity and safety requirements on the A38 and A5 have been fed into this process, and the District Council is committed to working with Highways England to look at these in more detail.

4.12 HS2 is expected to be in construction in the Streethay and wider Lichfield areas between 2017 and at least 2021. Due to the traffic management requirements for construction underneath the A38, and the number of HS2 construction vehicles which will be using network, carrying out further improvement work in this period is likely to cause unreasonable disruption for drivers, residents, businesses, and to her stakeholders. The District Council will work with partners to ensure that this period is used to investigate and develop long-term solutions for problems in the areas, so that these can be delivered in a timely fashion once the construction of HS2 is complete.

4.13 Developers looking to submit planning applications in these areas are advised to engage with the District Council, Staffordshire County Council and Highways England at an early stage, to identify transport assessment requirements and discuss how any potential need for mitigation may be handled in light of issues identified in paragraph 4.12 above.

4.14 A Strategy for the A5 (2011 - 2026) has been produced in partnership with Local Authorities, agencies and stakeholders along that part of the A5 which runs through Staffordshire, Warwickshire, Leicestershire and Northamptonshire.

4.15 The aims of the strategy are as follows:

- To ensure that the A5 is fit for purpose in terms of its capacity and safety, both now and in the future;
- To allow the A5 to play its full and proper role in supporting and facilitating economic activity and growth at a national and local level;
- To promote and encourage improvements to sustainable transport (walking, cycling, public transport and behavioural change measures) in order to help reduce congestion on the A5, improve air quality and deliver a lower carbon transport system; and
- To reduce, where possible, the impact of the A5 on communities along the route.

4.16 Within Lichfield District the strategy will focus on coordination between required improvements to the A38 in relation to the Wall Island and Muckley Corner junctions and the impact upon the A5.

4.17 In addition improvements relating to the Mile Oak junction of the A5, which arises as a result of the impact of development within Tamworth Borough are also included as part of the strategy. Whilst these improvements fall geographically within the District the infrastructure requirement is generated from Tamworth Borough and features within the Tamworth Local Plan.

Parking, walking and cycling to address strategic / cumulative impacts

4.18 Proposed Coach Park and City Centre Parking: The District Council has adopted a Parking Strategy in 2015 the strategy facilitates the provision of car parking to support the local economy and help achieve the aims laid out in the Strategic Plan for Lichfield District 2016-2020. The document makes a number of conclusions and recommendations which have an impact on infrastructure provision within the District.

- Lichfield District and in particular the City Centre is a popular destination with day trip coach operators and as such Section 7 of the Car Parking Strategy focuses on coach parking. Existing coach parking facilities are located with the Bus and Coach facility that will be absorbed by the proposed Friarsgate redevelopment. Currently proposals, via a live planning application focus on delivering replacement facilities within the long stay car park located at the Staffordshire University site.
- The Council should actively explore opportunities for variable messaging signage to aid customers and facilities an efficient parking system.
- If the Friargates development is not brought forward there may be a need for substantial investment in the existing car parking provision, particularly the Multi Storey Car Park adjacent to the Three Spires Shopping Centre.

4.19 Walking and Cycling: in terms of walking and cycling, Local Transport Note 1/12 was produced by the Government in 2012 ⁽ⁱⁱ⁾. This advocates the use of shared routes designed to accommodate the movement of pedestrians and cyclists. The Local Transport Note 1/12 should be considered in conjunction with Local Transport Note 2/08 Cycle Infrastructure Design (DfT, 2008b) and Inclusive Mobility – A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure (DfT, 2002a).

Rail

4.20 In the West Midlands, rail services are provided by a range of franchised train operators, the two key operators being Virgin and London Midland (the current London Midland Franchise is due to end in October 2017). Services are usually specified by the DfT who also set regulated fare levels together with quality and performance standards for the franchised operators. West Midlands Rail Ltd (a partnership of fourteen Metropolitan District, Shire and Unitary local transport authorities including Staffordshire County Council) has developed a proposition for rail devolution in the West Midlands which has allowed West Midlands Rail to have a meaningful level of influence over the specification of the new franchise and to lead with the management of the franchise in relation to West Midlands Local services.

4.21 The Invitation to Tend includes:

- The creation of two separable business units. One to be dedicated to West Midlands Local rail services, and management of operator performance and delivery will be led by West Midlands Rail.
- An increase in peak capacity in the West Midlands of 30%.
- All trains which entered service before 1995 will require a full refurbishment unless they are due to be replaced by December 2022.
- £150,000 across the franchise to support Community Rail.
- A £5 million Stations Improvement Fund is being provided across the franchise together with an additional fund of £9.6 million for passenger improvements based on customer, community and stakeholder feedback. A £300,000 a year minor works fund for enhancements to help improve accessibility has also been specified across the franchise.
- The new operator will be required to work alongside local authorities and bus operators to improve connections between bus and rail services including a best in class pilot scheme at Lichfield City Rail Station.
- All trains will be required to be fitted with free Wi-Fi by the end of 2019.
- An improved ticketing experience for customers.

ii <http://www.dft.gov.uk/publications/ltn-01-12>).

- A service Quality Regime is being introduced in the West Midlands to improve the quality of cleaning, maintenance and customer experience at stations, on train and in customer services.
- On Bank Holidays a Saturday level of service will run with the exception of News Year's Day when a Sunday level of service will operate.
- Increased off-peak, evening (Monday to Friday) and Sunday services between Birmingham and Rugeley from one to two services an hour.
- Later last services (Monday to Friday) from Birmingham to Rugeley and later last services on a Sunday from Birmingham to Rugeley.
- Increased evening frequency (Monday to Friday) and Sunday services between Birmingham and Lichfield City to four services an hour.

4.22 Staffordshire County Council recognises the need for a joined-up approach to rail and is currently consulting on the development of a rail strategy to be published late 2015.

4.23 The following paragraphs set out details of specific rail projects and has developed a draft Rail Strategy which is due to be published in 2017. The rail strategy includes a number of projects relevant to Lichfield District. These includes supporting:

- The introduction of additional rolling stock on the Cross City Line and Chase Line to alleviate problems of overcrowding.
- The introduction of earlier and later services together with increase Sunday services on the Cross City Line and Chase Line.
- New Services linking Lichfield Trent Valley and Burton upon Trent/Derby including necessary and relevant infrastructure such as electrification, capacity/speed improvements and re-signalling between Lichfield Trent Valley and Wychnor Junction.
- Improved ticketing experiences for passengers.
- New direct services on the Chase Line to Stafford and beyond.
- Investment in existing stations including Lichfields City, Lichfield Trent Valley and Rugeley Trent Valley together with the opening of new stations where there is a robust and clear business case such as at Alrewas/NMA.
- The long-term re-opening of Strourbridge to Walsall/Lichfield for freight services.
- The expansion of Community Rail Partnerships and community initiatives such as station adoption.

4.24 In terms of **national rail projects** which impact upon the District, Phase 1 of the **High Speed Rail Link (HS2)** will run from London to just north of Lichfield near Streethay / Fradley. A separate Phase 2a - providing a line from Lichfield District to Crewe - will involve the creation of a spur off Phase 1 at Fradley with the line continuing in a north westerly direction through the Ridwares before joining the District's boundary with Stafford Borough near Colton. There will be no stations or interchanges allowing for direct access to the HS2 route in Lichfield District. A separate Phase 2b route outwith Lichfield District is planned to link to the HS network.

4.25 The Hybrid Bill for HS2 Phase 1 as deposited in Parliament in November 2013 is currently at the House of Lords Select Committee stage. The District Council along with other partners challenged details of the original Bill and consequently negotiated a number of changes which the District feel will improve the impacts of the route on the residents of the District and its environment. On-going discussions are taking place in respect of outstanding matters of concern to the District Council including the potential implications of construction of the scheme. The Council also awaits publication in due course of a draft route and related environmental statement regarding Phase 2a to assess likely impacts and the possible need to challenge any future Bill as with Phase 1.

4.26 Given that this is a national project this is not an issue over which the IDP can have any direct influence, although updates on progress will be incorporated into this document to provide context. It is important to note that the need to manage the impact of HS2 proposals on affected communities and businesses is a need highlighted in the Integrated Transport Strategy for Lichfield District.

4.27 Trent Valley Station (Lichfield): A range of improvements are required, some of which have recently been delivered to Trent Valley station. This facility is significant to the whole of the District because of its connection with the West Coast Main Line, and more locally because of its connections with the Cross City Line, of particular relevance to Streethay and the Strategic Development Allocation.

4.28 A number of improvements have been identified as being required at the Station as follow:

- Disabled access;
- Improvements to on site car parking;
- Improvements to enable bus links to the site;
- Increased frequency of cross city line services to four trains per hour which is consistent with Lichfield City Station - requiring the construction of an additional high level platform.

4.29 Improvements to parking is also a key requirement in the area - increased parking is needed which reflects the station's importance on a strategic level, but which also reflects local growth at Streethay.

4.30 Significant progress has been made in term of addressing the identified areas requiring improvement. In terms of car park provision a new 125 spaces car park was opened in 2014. In addition the ticket office has been replaced and better passenger waiting facilities completed. These improvements have been funded through National Stations Improvement Programme (NSIP).

4.31 Following the announcement of Access for All Funding, further improvements to improve the accessibility of the Station are planned to be delivered after 2019. Delivery has been delayed due to the Hendy Review. Improvements are expected to include enhanced disabled access in the form of lifts to facilitate access to the Cross City and London bound platforms.

4.32 Rugeley Trent Valley Station: There are significant parking problems and issues relating to vehicular access at Rugeley Trent Valley station due to the very limited availability of on-site parking. There have been reports that rail users have been parking on local roads causing problems for local businesses and residents. A lack of passenger facilities is also an issue at Rugeley Trent Valley. A planning application was approved in 2011 for additional parking at the Yorkshireman pub which the applicant indicated would be available to assist with the parking issue locally (at a cost to the user), however additional solutions should continue to be sought in the area given the increasing usage of this station. This will become even more significant when the Walsall to Rugeley Trent Valley line is electrified. The project is due to be completed in late 2017. Once complete the electrification and speed limit increase will provide for an increase in service frequency, the accommodation of increased passenger demand and journey time improvements. This project does not include addressing parking capacity along the route so this is an issue for consideration and further work. No costings for parking improvements are currently available.

4.33 Shenstone Station: There is a need to secure an increased frequency of services calling at Shenstone Station in the AM peak. Local consultation suggests that car-parking capacity is an issue at Shenstone Station. Investment in car-parking capacity is therefore sought. The car park is operated by the Franchisee

4.34 Alrewas and the National Memorial Arboretum: There is a long term aspiration to deliver a station at Alrewas to serve the village and the National Memorial Arboretum, as well as serving the National Forest and Central Rivers Initiative area. This also requires the extension of services north of Lichfield Trent Valley via Wychnor Junction to Burton upon Trent as a minimum. Investment in necessary infrastructure is also likely to be required.

4.35 Rail Freight: There is a long term aspiration to reopen the line from Walsall via Brownhills and Burntwood to Lichfield. This would initially be for freight and possibly for passenger services. This aspiration includes the potential delivery of a station in the Burntwood area. However, there is currently no industry need in the short-term to re-open this line.

Energy

Gas and electricity

4.36 In terms of infrastructure improvements needed for gas and electricity, the utility companies have a statutory ability to directly charge developers and customers to fund improvements required and this will take place during development. No strategic issues have been identified.

Renewable energy

4.37 In terms of renewable or low carbon energy / wind power and other technologies, developers will need to work with Lichfield District Council, Ofgem and individual suppliers to meet the sustainable energy targets set out in the Local Plan Strategy and supporting Sustainable Design Supplementary Planning Document.

4.38 The District Council is supportive of low carbon initiatives, Low Carbon Initiatives / Carbon Investment Fund features on the Regulation 123 list with the intention to support the delivery of Local Plan Strategy policy SC1 which states "The District Council is developing a Carbon Community Fund (CCF) which will support the achievement of carbon targets through financial contributions". In addition carbon targets can be delivered entirely through on site measures by providing investment into energy efficiency and low carbon energy generation technologies.

Water and Drainage

Water resources and supply

4.39 [The Southern Staffordshire Outline Water Cycle Study \(WCS\)](#) (July 2010) was undertaken in light of the proposed growth requirements relating to the West Midlands Regional Spatial Strategy (WMRSS) Phase 2 revision i.e. 8,000 homes, 99 hectares of general employment land and 30,000m² of office space for Lichfield District. Whilst the WMRSS has since been abolished, the message from the WCS is that, in principle, and subject to careful phasing of development, there are no 'show stoppers' for the levels of growth identified in the Local Plan Strategy but there would be problems with higher growth scenarios across the study area which would require significant infrastructure investment.

4.40 In response to previous consultation stages of the Local Plan Strategy, South Staffordshire Water (SSW) has advised that there are no problems with supply. However, the WCS indicates a need for infrastructure investment and the action which South Staffordshire Water needs to take, working directly with developers, is as follows:

Water Resource Infrastructure Needs (defined by the Water Cycle Study)**Water supply**

South Staffordshire Water can supply water to all developments, but some may require additional investment, which is achieved by the developer working directly with the supplier.

- Major upgrades will be required for all sites in Burntwood, and sites which link to the Brownhills network, including supply mains.
- Minor infrastructure upgrades will be needed for:
 - Fradley Airfield;
 - North Streethay;
 - Fazeley; and
 - South Lichfield.

Water abstraction

Any developments requiring the abstraction of water should consider the information contained within the Catchment Abstraction Management Strategy (CAMS) and should apply to the Environment Agency for the relevant licence (although there is no guarantee it would be granted).

Limited water availability from the surface and groundwater management units, especially within the currently Over Abstracted Bourne / Black Brook and the Lichfield and Shenstone Ground Water Management Unit (GWMU) may impact current and future agricultural practices and small commercial developments.

4.41 A Water Abstraction Licence is required for watering of Lock 26 of the Lichfield Canal. Watering of the whole section needs further assessment to be undertaken by the Canals and Rivers Trust and the IDP will be updated accordingly as this matter is progressed.

Waste Water Collection and Treatment

4.42 New development will need to take account of the need to plan for the disposal of waste water and sewage as this will have a cumulative impact across the District.

4.43 The WCS advises that the following actions will be needed in terms of waste water collection and treatment. Severn Trent Water Limited will work directly with developers to address these issues:

Waste Water Collection and Treatment Infrastructure Needs (defined by the Water Cycle Study)

Wastewater Collection

- Additional hydraulic analysis to be carried out by Severn Trent Water Limited (STWL).
- Some sites need improvements to increase capacity, primarily around Streethay and Fazeley.
- Some areas around Little Aston and Shenstone require improvements to the network to accommodate additional flow.

Wastewater Treatment

- All Waste Water Treatment works (WwTWs) need expansion or additional analysis to accommodate the additional flow with the exceptions of Rugeley, Armitage with Handsacre, Colton, Hamstall Ridware and Shenstone.
- There is no hydraulic capacity at Alrewas, Bassets Pole and Lichfield so significant investment would be required.
- The WwTW at Alrewas has very limited water quality headroom.
- There are physical (i.e. space required) and quality (i.e. capacity to process effluent properly) constraints to the WwTWs at Alrewas, Burntwood and Lichfield so significant infrastructure investment will be necessary where development is proposed. These issues also relate to Clifton Campville and Edingale if these communities wish to take on any small localised development in line with the spatial strategy proposals for small rural settlements.
- New Consent to Discharge may be refused for either Clifton Campville WwTW and/or Edingale WwTW, affecting the villages of Edingale, Clifton Campville and Harlaston which again has implications if these communities wish to take on any small scale localised development in line with the spatial strategy proposals for small rural settlements, because of the implications for the impact on the River Mease SAC.

Water Management and Flooding

4.44 Water Management and Flooding

4.45 Issues need to be addressed on a district/sub-district basis as well at the local level where the Environment Agency and Lead Local Flood Authority (LLFA) have advised that there is flood risk or a potential impact upon areas of flood risk. The infrastructure required to address issues raised will need to be in place prior to development taking place and will be agreed between the developer, the Environment Agency and LLFA.

4.46 Staffordshire County Council is a Lead Local Flood Authority (LLFA) with a number of statutory duties to address local flood risk under the Flood and Water Management Act 2010 and Land Drainage Act 1991. These duties involve helping to develop a strategic

understanding of flood risk from all sources, promote the effective management of drainage and flood defence systems and to manage local flood risk and new development in a sustainable manner.

4.47 Sustainable Drainage Systems (SuDS) also need to be provided by the developer, in line with national legislation and in accordance with LLFA requirements which should include an agreed management plan. It is not possible to provide an indicative overall costing for SuDS as this will depend upon the individual circumstances relating to each site, however national guidance, research and emerging [codes of practice](#) are available and this will assist with evaluating viability assessments in relation to individual developments.

4.48 Settlements which are at high risk of surface water flooding, and which will therefore require particular attention on a site by site basis are:

- Lichfield;
- Armitage with Handsacre and the Longdons;
- Burntwood;
- Elford;
- Little Aston;
- Mile Oak and Fazeley; and
- Whittington.

River Mease SAC

4.49 Foul effluent from the existing built environment has been identified as a major source of phosphate into the River Mease SAC. Therefore sewage treatment works (STWs) make a significant contribution to phosphate within the catchment. Phosphate removal at STWs has been demonstrated to be the most effective mechanism to date in reducing phosphate in the River Mease SAC with phosphate removal plant having been installed at a number of sewage treatment works within the Mease catchment. Further detailed can be found within the Strategic Green Infrastructure section of this document.

Waste

4.50 Waste Services are delivered through a shared service with Tamworth Borough council, costs attached to this service will be met through Council Tax.

4.51 In terms of waste management and disposal, Staffordshire County Council has identified via the Staffordshire and Stoke on Trent Joint Waste Local Plan the need for several new facilities within a number of broad locations. (footnote www.staffordshire.gov.uk/environment/planning/policy/wastecorestrategy/home.aspx).

4.52 Across the Staffordshire and Stoke broad area of search the Joint Waste Local Plan adopted in 2013 identified the need for the following new waste capacity Solid Waste (MSW) and Commercial and Industrial Waste (C&I) treatment to 2026:

- Recycling Material Recovery (mechanical Sorting): 6-8 facilities or around 0.9ha each;

- Organic Waste Treatment : 2-3 facilities of between 0.9ha to 1.3ha each;
- Recycling/Material Recovery : 2-4 facilities each between 2 to 4 ha in size and requiring locations close to large areas of development / construction.

4.53 The Authority Monitoring Report 2014/2015 (paragraphs 37 – 39) however identifies that as a result of planning permissions for new facilities, the targets for recycling and organic treatment capacity at 2025/26 are being met. It however needs to be taken into account that the targets are a minimum amount of capacity provision.

4.54 The Joint Waste Local Plan sets out a hierarchy (policy 2.3: Broad Locations) in terms of siting facilities of a local or sub-regional scale, this focuses upon large settlements across the Staffordshire and Stoke area and locally this includes Lichfield, Tamworth and Rugeley, with Burntwood being included for facilities of a local scale.

Communications

4.55 The need to reduce travel and to enable people to access services both in economic and social terms increasingly depends upon electronic communications. Work with rural communities, through the Rural Planning Project, has identified concerns over patchy mobile phone coverage and slow broadband. Staffordshire County Council and Broadband Delivery UK (BDUK) are actively seeking solutions to the issue. Superfast Staffordshire , which brings together £29m of investment from Staffordshire County Council, Broadband Delivery UK(BDUK) and BT is delivering access to superfast broadband (>24Mbps) to 96% of premises throughout Staffordshire by the end of 2018 . Rollout in Lichfield District began in 2014 and is expected to cover 94% of premises by the end of 2018.

4.56 By the end of 2016, 93% of Staffordshire and Stoke premises(468,000) have access to superfast broadband (minimum 24MB per second) and all premises have access to a minimum of 2Mbps broadband. By 2020 the government will ensure that all premises have the right to request a minimum of 10Mbps, through the introduction of the Universal Service Obligation.

4.57 New developments should be required to provide access to superfast broadband as an integral part of the infrastructure requirement for sites.

Town Centre improvements

Lichfield City

4.58 Investment in the City Centre is proposed in three phases, all private sector led but with land contributions from Lichfield District Council.

4.59 The first element which was completed in 2014, consisted of the re-development of the existing Friary Outer car park to enable the delivery of a Premier Inn hotel, expanded public car parking provision, sheltered housing and affordable housing delivered for Bromford Housing Association.

4.60 The second is the Friarsgate development, a major retail and leisure led redevelopment of 3.1ha of land within the city centre. In summary it comprises:

- Retail: 15,031 sq.m flexible retail space (including a link to the existing Three Spires Shopping Centre) comprising 7-10 units to be occupied by food and beverage operators and up to 25 units to be occupied by retailers.
- Leisure: A 7 Screen cinema with floorspace of 2,070 sq.m and a 579 sq.m gym.
- Housing - 93 residential units comprising 39 one and 43 two bedroom apartments and eleven three bedroom townhouses.
- Car parking - circa 500 space contained within an undercroft car park and multi storey car park over 5 floors.
- Public realm - construction of 'The Circle' public realm at the heart of the development.
- Replacement Bus interchange - creation of new turning lanes, new pedestrian crossing and new SCOOT system in the strategic roads adjacent to and near to the site.
- Demolition: Removal of a number of buildings which are out of character with the Conservation Area that the development sits within.

4.61 The third element, programmed to commence only once the Friarsgate scheme is complete, is a proposed mixed use development of the site of the Bird Street car park. This will potentially include new specialist retail, increased public car parking, residential, leisure, office and community facilities through re - development of the car park and adjacent areas.

Lichfield City Centre Development Strategy

4.62 Key city centre partners and landowners, including the district, county, city councils, the cathedral, diocese, college/university and trade bodies and the Lichfield BID have adopted the Lichfield City Centre Development Strategy 2015 – 2020. Strategic objectives of the strategy focus on following;

- Creating an attractive, multi -faceted yet coherent city centre , which encourages visitors to linger and explore.
- Improve the quantity, quality and appeal of the city's attractions and facilities, to attract and cater for a year round increase in visitors and spending.
- Improve access to and within the city and facilitate orientation and exploration.
- Raise awareness of Lichfield and its individual assets and facilities as a leading heritage and events city in central England.

4.63 The document supports a cluster of infrastructure requirements which are detailed within other sections of the IDP including: Friarsgate, Bird Street Car Park redevelopment, restoration of Stowe Pool, coach park, improved station facilities, enhanced pedestrian routes, further pedestrianisation of the City Centre and support for actions that promote tourism, better signage. In addition the strategy identifies improvements to green infrastructure through the creation of walk along the North Side of Minister Pool and improvements to public toilets provision.

4.64 The designation of a Business Improvement District (BID) within Lichfield City Centre was supported at a vote which took place during July 2015. The Lichfield BID Business Plan 2015-2020 identified a range of projects that fall under five key themes which will focus on making Lichfield City Centre a safer, more pleasant and vibrant place to shop, eat, drink and operate businesses in. The Business Plan identifies public realm and signage and infrastructure elements that require investment, both requirements have been captured in other sections of the IDP.

4.65 In addition, the Civil Parish of Lichfield was designated a Neighbourhood Plan Area on the 10th December 2014 and are progressing with the development of the plan which will have an economic focus as its central theme. The IDP will be updated accordingly to reflect the progress of this document.

Burntwood

4.66 Physical infrastructure requirements focus upon the need to provide a new town centre for Burntwood, which is one of the key elements of the Spatial Strategy. This includes the need to provide an increased retail and leisure offer and appropriate transport infrastructure to support this growth. The retail/leisure offer is dependent upon private sector investment: the transportation provision identified would require investment in the form of developer contributions.

4.67 In in line with Core Policy 10: Healthy & Safe Lifestyles policy theme and Policy Burntwood 2, there is a requirement to undertake improvements to the centre of Burntwood (Sankeys Corner). Whilst small scale environmental improvements have been delivered in recent years there remains a need for further investment focusing on the delivery of well designed public realm.

4.68 The Burntwood Business Community (Burntwood's recently formed Town Team) is a fully constituted group with its own funds and management committee made up of local traders. The group has recently focused on delivering environmental and infrastructure improvements to Ryecroft Shopping Centre car park along with developing a scheme to improve highway signage to neighbourhood centres. They are currently in the process of developing a business premises environmental improvement scheme which will award grants to local businesses to improve the appearance of their shop fronts.

Tourism

4.69 Tourism infrastructure needs are covered primarily through the Town Centre improvements section (above) in particular through the City Centre Development Strategy and also feature within the Green Infrastructure section of the IDP.

4.70 Cultural facilities are an important part of local infrastructure and contribute not only to the local economy and tourism, but also to the network of social and community infrastructure. The Burntwood Town Strategy (2011) indicates that a long standing desire to provide arts space within the town. It is important that, over the plan period, the importance and role of cultural infrastructure is recognised.

4.71 A desire has been expressed to link the National Memorial Arboretum at Alrewas to Alrewas village to ensure continuity of walking and cycling routes and to help stimulate more local tourism and recreation associated with the site. This would require a safe way of crossing the A38 and a footbridge has been identified as the most appropriate way to do this.

Employment

4.72 Whilst employment sites are to be delivered by the private sector, it is important that employers are encouraged to recruit local people in order to boost the local economy and reduce the need to commute long distances by car. The District Council Adopted in 2016 their Economic Development Strategy (2016-2020). The Strategy focuses on the following key Strategic Objectives,

- Provide a suitable range and mix of employment opportunities to boost jobs.
- Increase the number of new business start-ups and overall business survival rates.
- Provide an appropriate balance between jobs and housing.
- Encourage increased levels of investment and spending by the public, private and voluntary sectors in to the District.
- Deliver enhanced levels of prosperity to all communities.

4.73 The strategy is based on the following themes Place, Business and People. Much of the support needed is likely to be revenue funded e.g. skills development however a number of the Place aims identify infrastructure requirements including Friarsgate, Burntwood Town Centre, transport Infrastructure Investment, sustainable housing and broadband and mobile phone network provision, all of which have need identified as infrastructure requirements within the Strategic Infrastructure section of the IDP.

4.74 Employment sites should also be supported by other infrastructure where there is a local need and the plan should be flexible to allow for this e.g. uses ancillary to employment sites might include a cafe or childcare facility with the view to these being used primarily by local employees. These would need to be market-driven enterprises which would be assessed on their own merits as part of the planning applications process rather than being rigidly specified at the outset of a development proposal, as this would not be viable or sustainable.

Summary Table

Table 4.1 Strategic Physical Infrastructure: summary of improvements needed which will arise either directly, indirectly or cumulatively as a result of development impacts.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Transport: generic (including road, public and private transport, walking and cycling)				
Lichfield District Integrated Transport Strategy (2015-2029) short term interventions.	1. £0.5m 3. £50,000 4. £75,000 5. £70,000	Developer contributions CIL and Section 106 see Regulation 123 list for detailed split and other funding streams.	Short term prior to 2018	Staffordshire County Council
1. Lichfield City Centre Local Transport Package – walking and cycling improvements to include links to Lichfield City Rail Station.				
2. Electric charging points where appropriate				
3. Coach Parking.				
4. Real time information including signage to car parks.				
5. Delivery of local traffic routing scheme including signing improvements.				
Lichfield District Integrated Transport Strategy (2015-2029) long term interventions	Proposed improvements have not yet progressed to cost estimate stage. Once elements have been progress costs will be included.	Developer contributions CIL and Section 106 see Regulation 123 list for detailed split and other funding streams.	Phased approach aligned to development trajectory, covers short, medium and long term up until 2028.	Staffordshire County Council
1. South Lichfield				
2. East Lichfield including Fradley				
3. Lichfield City Centre Package				
4. Burntwood Transport Package				
Completion of Lichfield Southern Bypass between A5127 Birmingham Road and A5206 London Road	£8.7m (underbridge construction cost) – current estimate including optimism bias	Bids for £4.35m of Growth Deal funding made to	Table 4.2 Rail possessions proposed in	Staffordshire County Council/Developers

4 Strategic Infrastructure

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
	<p>£0.5m development and design</p> <p>£12m - remaining section of road (underbridge to A5206 London Road) including optimism bias</p> <p>Total cost £21.2m</p> <p><i>Note: optimism bias included as per DfT Stage 1 guidance.</i></p>	<p>both GBSLEP and SSLEP (totalling £8.7m).</p> <p>If this is not successful and alternative funding is not available, an application for CIL funding will be completed.</p> <p>LTADS funding available of approximately £0.7m</p> <p>Developer contributions to deliver section of bypass providing acceptable mitigation and access arrangements to the Lichfield South SDA</p>	<p>December 2019 with underbridge open in 2020.</p> <p>Delivery of section between underbridge and A5206 London Road aligned to development trajectory for South Lichfield SDA</p>	
<p>Junction improvements at:</p> <ol style="list-style-type: none"> 1. Sainte Foy Avenue / A5127 / The Friary 2. Bowling Green Roundabout 3. Cappers Lane/Burton Old Road roundabout. 4. A5127 / Eastern Avenue / Valley Lane 5. St John Street / A5127 / Upper St John Street 6. A5206 London Road / Shortbutts Lane / Upper St 	<p>No costings currently available</p>	<p>S278 agreements with developers.</p>	<p>Scheme 6: short term. Other schemes medium to long term</p>	<p>Staffordshire County Council</p>

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
7. John Street / Tamworth Rd A5127/Greenhill/Gresley Row/Tamworth Street junction				
Burntwood Local Transport Package: includes new bus infrastructure and walking and cycling improvements	£750,000 public transport £250,000 walking and cycling improvements	Developer contributions CIL and Section 106 see Regulation 123 list for detailed split and other funding streams.	Phased up to 2028	Staffordshire County Council
Burntwood Transport package	£0.6m Smarter Travel Choices £0.6m walking and cycling £1.2m public transport £0.6m making best use of existing transport network	Developer Contributions and other funding streams.	To tie in with town centre improvements	Staffordshire County Council
Transport: improvements to the Strategic Road Network				
Muckley Corner	Approx costs subject to detailed design £5m	Potential funding sources: Highways England via RiS2 Developer funding (CIL) LEP growth fund	Medium term 2018 - 2023	Highways England
Swinfen	Approx, costs subject to detailed design £2.2m	Potential funding sources: Highways England via RiS2 Developer funding (CIL) LEP growth fund	Medium term 2018 - 2023	Highways England

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Further junction improvements on A38 (Hillards Cross and Fradley South)	Approx, costs subject to detailed design £10m	Potential funding sources: Highways England via RiS2 Developer funding (CIL) LEP growth fund	Medium to long term 2018 - 2023	Highways England. (Lichfield District Council working with partners to secure long term improvements).
Transport: Rail				
Station improvements: Lichfield Trent Valley to include, additional parking linked to growth associated with Streethay SDA and disabled access provision via the installation of a lift	To be confirmed	National Stations Improvement Plan, Network Rail, franchisee, developer contributions.	Short to medium term	Staffordshire County Council and Lichfield District Council and other organisations to work with Network Rail and Franchisee (London Midland) to secure improvements.
Rugeley Trent Valley station: improvements to parking and passenger waiting facilities.	No costings available at present	Network Rail, franchisee, developer contributions	Medium to long term	Staffordshire County Council and Lichfield District Council and other organisations to work with Network Rail to secure improvements.
Shenstone station: increased car parking, and increased frequency of train service serving the village.	No costings available at present	Network Rail, franchisee, developer contributions	Medium to long term	Staffordshire County Council and Lichfield District Council and other organisations to work with Network Rail to look at proposals further.
Reinstate passenger service (extension of the electrified Cross City Line - to Burton) and deliver a station at Alrewas to serve the village and the National Memorial Arboretum. This requires	No costings available at present	Network Rail, franchisee, developer contributions	Long term	Staffordshire County Council and Lichfield District Council and other organisations to work with Network Rail to look at proposals further.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
the extension of services north of Lichfield Trent Valley via Wychnor Junction to Burton upon Trent.				
Reopen line from Walsall to Lichfield via Brownhills and Burntwood: initially for freight and then for passenger services, to include delivering a station in the Burntwood area.	No costings available at present	Network Rail, developer contributions	Long term	Staffordshire County Council and Lichfield District Council and other organisations to work with Network Rail to look at proposals further.
Energy				
Delivery of renewable energy to meet the sustainable energy targets set out in the Local Plan (Policy SC2). Low Carbon Initiatives / Carbon Investment Fund	Costs will vary depending on schemes	CIL and range of other sources as applicable to the detailed scheme.	Throughout the plan period	Developer, working with Lichfield District Council, opportunity for
Water resources, supply and flood risk				
Water supply: major upgrades required for Burntwood. Minor upgrades to: Fradley, Streethay, Fazeley, South Lichfield. See Priority 3.	Details between South Staffordshire Water and developers.	South Staffordshire Water with developers.	In line with development trajectories. Short to medium term Burntwood, Fradley, Fazeley and South Lichfield (prior to 2018); medium term for Streethay (prior to 2023).	Developer working with South Staffordshire Water.
Water abstraction: to take account of the Catchment Abstraction Management Strategy (CAMS). See Priority 3.	Will vary	Developers	Ongoing throughout plan period.	Developers to work with the Environment Agency (licence required).
Mitigation for matters relating to flood risk as identified by the	Will vary depending on locations and sites	General measures may benefit from CIL	Ongoing throughout plan period.	Developers and Environment Agency.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Environment Agency and Lead Local Flood Authority (LLFA)		funds. Site specific SUDs will be secured through planning conditions or s106.		
Waste water collection and treatment				
Investment in wastewater collection sites as set out under Priority 4.	Details between Severn Trent Water and developers.	Severn Trent Water, Developers	Short to medium term to align with development trajectory.	Severn Trent Water with developers
Investment in wastewater treatment works as detailed under Priority 4.	Details between Severn Trent Water and developers.	Severn Trent Water, Developers	Short to medium term to align with development trajectory	STW with developers
Communications				
Broadband improvements across the District, including rural areas.	Costs will vary across the District depending on projects. (29m investment across the Staffordshire County)	Staffordshire County Council, Broadband Delivery UK(BDUK) and BT	Short term prior to 2018.	Staffordshire County Council with BDUK and other providers.
Town Centre Improvements				
Lichfield City Improvements: <ul style="list-style-type: none"> Friarsgate (retail and leisure) Bird Street car park redevelopment. 	£50m approx build costs (Friarsgate). Note this cost is included here for reference but should not be included in any funding gap assessment. Bird Street - no information currently available.	Private sector funding. GBSLEP & SSLEP Growth Fund - approved applications £5.06m	Friarsgate short term (delivery by 2020), Bird Street after completion of Friarsgate.	Private sector led via a development agreement with Lichfield District Council
Walkway to the North Side of Minister Pool	It is recognised that there are significant conservation and arboricultural issues to be overcome to drive this project forward and a feasibility study would be required which will inform estimated costs	Grant Funding	Post 2017	City Centre Partnership, Cathedral Lead

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Improvements to existing public toilets.	Costs will vary depending on design responses following feasibility work	LDC	Post 2018	City Centre Partnership, LDC Lead
Burntwood Town Centre improvements: improved retail, community facilities and leisure to deliver a town centre.	£7.1m.	Mainly private sector funding Potential LEP growth funding	Short term	Private sector led in partnership with Lichfield District Council
A range of public realm improvements to Burntwood, including works at Sankeys Corner, and improving and increasing parking in Burntwood Town Centre.	£586K.	Sources will vary, including CIL / S106 Potential LEP growth funding	Short term	Staffordshire County Council, Lichfield District Council, Burntwood Town Council, developers and other partners as applicable.
Range of environmental improvements across Burntwood to improve existing retail areas of the town.	£51K	Secured Business Innovation Fund	Short Term	Burntwood Business Crew
Other public realm improvements across the District as applicable.	Will vary	Will vary	Throughout the plan period.	Staffordshire County Council, Lichfield District Council, and other partners as applicable.
Employment				
A range of infrastructure to support employment sites e.g. creche, cafe, open space for employees etc	£4.1m	Private sector	Throughout plan period	Private sector
Infrastructure to support skills and training.	Schemes will vary	Public, private and voluntary sector.	Throughout plan period.	Partnership approach depending upon scheme.

Strategic Social and Community Infrastructure

Housing mix

4.75 The Local Plan Strategy seeks to achieve a balanced housing market which serves the needs of the District's communities. Given the ageing population of the District, older residents will need to be specifically catered for, to ensure that housing addresses their changing needs, whether this relates to them having the support they need to remain in their own homes for longer, or a choice of alternative accommodation such as sheltered housing or a higher level of care. For this reason the following will need to be provided as part of the District's housing portfolio:

- Provision of supported housing and care homes;
- Smaller dwellings of all tenures; and
- Residential layouts that ensure that communities are designed with the wellbeing of the ageing (and less mobile) populations in mind.

4.76 Development Management Policy H2 is designed to ensure sufficient and relevant provision of affordable homes. A target is set by the policy that up to 40% of new dwellings (including conversions) must be provided as affordable housing. This may be subject to economic viability testing where necessary on a site by site basis. In order to assist with delivery, developers will be expected to seek Homes and Communities Agency investment where available, or other delivery mechanisms such as Public Land Initiatives and Local Asset Backed Vehicle arrangements. For Lichfield and Burntwood, affordable housing will be required on housing developments of 15 or more dwellings or on sites over 0.5ha in size and in accordance with nationally set thresholds. Outside of the two main urban areas cited above affordable housing will be required on housing developments in line with nationally set thresholds. The detailed criteria are set out in Policy H2.

4.77 Policy H3 of the Local Plan sets out the requirements for providing for Gypsy, Traveller and Travelling Showpeople needs, taking into account National Planning Policy for Traveller sites (CLG March 2012) and the local evidence base. Site specific infrastructure requirements are set out in the national Good Practice Guide: 'Designing Gypsy and Traveller Sites', in determining specific on-site infrastructure needs.

Education and Skills

4.78 Staffordshire County Council is responsible for the overall provision of state education within the District (although some schools now operate independently as Academies). New residential developments are likely to bring more children into a school catchment area which will impact on school rolls. In some cases, particularly in the south of the City and in some rural areas, the existing primary schools do not have the spare capacity to admit additional children. Secondary school rolls are increasing with larger cohorts coming through the primary schools, additional new pupils from housing will put additional pressure upon existing school facilities. Consequently, contributions will be required towards the cost of school infrastructure, where a development would lead to an increase in school places as a result of new housing, or where it would place pressure on restricted infrastructure.

4.79 Schools also play a significant role in the community beyond their statutory remit. Extended schools' operate in various ways, branching out to serve local communities for example through allowing use of their premises for before and after school and holiday clubs, community use, activities, support and access to services. There is a real opportunity for innovation, particularly where new schools are required as part of the Strategic Development Allocations (SDA), linking schools with the requirement for local community centres, community hubs, sport and recreation provision. Such an approach can maximise use of space by providing flexible and multi-functional areas which can be used both by schools and the wider community. This also has the potential to minimise costs by linking buildings and spaces together.

Primary education

4.80 New and enlarged primary schools (incorporating nursery provision) will be required to mitigate the planned growth within the Local Plan at the following SDAs: Fradley, Streethay, Deans Slade Farm and South Lichfield.

4.81 In Fradley a 315 place (1.5 Form Entry (FE)) new school is required for the 1,000 dwelling strategic development location at Fradley Park and a 105 place (.5FE) extension to St Stephen's Primary School for the Fradley village strategic housing allocation. In Lichfield City, on the East, a 315 place (1.5 FE) school is required for the Streethay SDA, and to the south of the City new development generates a cumulative need for a total of a further 3FE. Existing school sites do not have the capacity to expand by the required amount and therefore places will be delivered as two new schools; a 210 place school (1FE) on Deans Slade Farm and a 420 place school (2FE) on South of Lichfield which will provide for the South of Lichfield and Cricket Lane SDA's as well as the need from other development in the area. The delivery of these schools may be phased inline with the development of the 3 SDA's.

4.82 This demand is over and above the new primary school which recently opened in Cherry Orchard to meet an immediate shortfall in provision as schools in the south of the City are already at capacity. S106 contributions will be collected towards the cost of the infrastructure required to meet the needs of the SDA's.

4.83 Two primary school extension projects have been included on the CIL 123 list for Hob Hill Primary School and All Saints CE (VC) Primary School at Alrewas. The project to provide 105 additional places at Hob Hill was approved in November 2015 and the places are expected to be delivered in 2017.

4.84 Where the need for a new school is not specifically identified, developer contributions will still be required to ensure that existing schools in the area have the capacity to take on the increasing numbers of children likely to result from the development.

4.85 Cross boundary provision will need to be considered in the longer term to address the impact of further development in and adjacent to Rugeley which includes parts of Lichfield and Cannock Chase District Councils. Over the plan period. A new primary school will be required to serve the needs of the redevelopment of Rugeley Power Station and potential further expansion to existing schools in the area.

Secondary and higher education

4.86 Secondary and post sixteen places need to be addressed at the District – wide level due to the size of catchment areas: all developments will need to make a contribution to this provision.

4.87 Secondary education capacity is required to increase from 20FE to 25FE to accommodate generated need for housing growth over the period of the Local Plan. Additional capacity will be delivered by enlarging all three existing high schools in Lichfield; Netherstowe, The Friary and King Edwards VI High School. Lichfield District Council has recently given notice to terminate the lease of leisure facilities on the King Edward site which may impact on the strategy for enlargement of the three schools. An updated secondary school expansion strategy is currently being prepared. In line with current housing trajectories the first phase of enlargement will need to be delivered by September 2019.

4.88 The raising of the education participation age has implications for infrastructure over the plan period. This does not just relate to schools, although there is an anticipated slight increase in sixth form attendance, but more work place opportunities will be required alongside apprenticeships and Further Education college placements. The role of the County Council (Local Education Authority) is to commission places for students and provide the necessary funding, which will primarily be in the form of revenue, rather than capital infrastructure needs.

4.89 Staffordshire Local Education Authority has identified costings of £22m over the plan period for investment in secondary and post 16 education, which mainly impacts upon Lichfield City and its associated catchments.

4.90 Staffordshire County Council has produced the Staffordshire Learning Infrastructure Framework which sets out how those with a role to play in providing childcare or education places for Staffordshire's children can work together. Updates on the Learning Infrastructure Framework will be included in updated versions of the IDP.

Community Provision

4.91 Community provision is covered primarily in the 'local infrastructure' section as this deals with a range of local needs, rather than wider strategic issues, and these issues vary from community to community.

4.92 No broad strategic infrastructure needs have been identified in terms of community provision although Burntwood Town Council has indicated a shortfall in the town: this is covered in the 'local infrastructure' section.

4.93 Strategically it is important that the IDP recognises the need to be flexible over the plan period, as the needs of the community will change over time. Therefore the IDP will need to pick these issues up as they arise - it is a 'living' document which will be regularly updated. It is particularly important that the needs of the voluntary sector and organisations supporting and developing communities are recognised and addressed.

4.94 Access to a community facility is a vital part of any residential development. Community facilities need to be provided as part of the Strategic Development Allocations and as such are also detailed local infrastructure chapter. Space should be flexible and able to

accommodate a range of uses. There are no national or local standards for the provision of community facilities and there is scope for innovation (see 'Education' above), and details will need to be worked up which address the particular needs and issues of each development. As a broad principle each facility should comprise the following as a minimum:

- Main hall large enough to accommodate sport activity which should be capable of being sub divided for smaller meetings / events;
- Smaller rooms (minimum of two) for smaller meetings and to enable outreach facilities to be run from the facility. These rooms should be private as they are likely to be used, for example, by outreach health services or by the voluntary sector. In addition the police have stated that they will require a presence in new communities and will need a facility from which to operate - this shared community space could offer such a facility; and
- Access to a secure outdoor area suitable for playing outdoor games etc.

4.95 Within Lichfield District the Citizen's Advice Bureau is located in both Lichfield and Burntwood offering communities support in a wide range of situations.

Health and Wellbeing

Health centres/doctors surgeries

4.96 The NHS is currently working towards delivering the Five Year Forward View, which commenced in October 2014 and sets out a clear direction for the NHS, focusing on communities and partnership working – across the whole public sector.

4.97 In June 2015, the Department of Health requested each CCG/local health system to produce a Strategic Estates Plan setting out the vision for the estate. As a result of the Social Care and Health Act (2012), the main responsibilities for the NHS estate lie with individual Trusts, Community Health Partnerships and NHS Property Services. The GP estate is mainly independently owned by GPs, who are supported by NHS England. Strategic Estate Advisor services were provided to each health system on behalf of the Department of Health by both Community Health Partnerships and NHS Property Services, with each CCG being allocated a designated advisor. The Staffordshire health economy is being advised by Community Health Partnerships.

4.98 The Staffordshire health economy consists of 6 defined areas – North Staffs, Stoke-on-Trent, Cannock Chase, SE Staffs and Seisdon Peninsula, Stafford and Surrounds and East Staffs, each of which is represented by a CCG. There are also 5 Trusts that cover the area.

4.99 In order to deliver the interim Strategic Estates Plan (SEP) by December 2015, the local health economy, through NHS England and Community Health Partnerships (CHP) established a Staffordshire wide Local Estates Forum, which brought together all the key health organisations to establish the priorities across the area. Focusing initially on Primary Care, due to the Primary Care Infrastructure Fund (PCIF) (now known as the Estates and Technology Transformation Fund (ETTF)), the interim SEP identified the current position of the health economy as well as key potential future opportunities.

4.100 The ETTF provided opportunities to transform primary care services and numerous possible schemes were identified and formed a part of this planning process and helped with the prioritisation of possible projects.

4.101 A crucial aspect of the Staffordshire health economy is that it works together as a whole area. This has now been further cemented through the STP (Sustainability and Transformation Plan) footprint, and as we progress on to the next steps of the strategic estates work, there is now full integration with the Provider Trusts as well. There is an Estates Workstream set up as an enabling workstream of the STP and this is supporting the transformation of the system. Through working across workstreams of the STP, there will be a joined up approach with the clinical strategies and the enablers for change, such as workforce, digital technology and the estate, enabling whole footprint transformation to be possible. This has enabled opportunities to be identified which will deliver real change for the people of Staffordshire and Stoke-on-Trent and will set the direction of travel for the years to come.

4.102 The NHS through the STP process are seeking to develop new models of care that are community based, these will incorporate enhanced primary care at scale, simplified models of urgent and emergency care and new care pathways, with planned care, wellbeing and prevention at the heart of the long-term strategy. These will all require reconfiguration of the infrastructure at a community level, with provision of new developments that enable co-location and co-delivery of services with partner organisation. An innovative approach to such integrated infrastructure models is already developing in Staffordshire with the intention of expanding and enhancing this across all districts within the STP footprint.

4.103 As the Local Plan and the IDP were being formulated, the main input in relation to infrastructure provision was provided by representatives of the relevant PCTs. This is the most up to date information available at present, and will be updated accordingly:

- The PCT identified the need for new/additional provision in Burntwood, there is currently commitment to deliver one new health centre. The IDP will be updated when further information becomes available;
- In terms of Fradley, the PCT advised that there is currently no provision within Fradley itself, with residents using facilities at Alrewas and Lichfield. There is some limited additional capacity at Lichfield. It is however recognised that there is a health provision need in Fradley and it is expected that this will be reflected in the ongoing transformational work being undertaken by the NHS in order to ensure the sustainability of General Practice for the future.
- In terms of other the key rural settlements, there may in the future be capacity issues within the Fazeley area.

4.104 In order to provide strategic direction and coordination of health provision across the District a focus group has been established.

Accessibility

4.105 Infrastructure planning needs to take account of the needs of people with restricted mobility. The Disability Discrimination Act addresses many of these needs but there is much more that can be done through the early consideration of issues, and it is recommended that, as projects come forward through the infrastructure planning process the input of appropriate groups is sought at the earliest opportunity.

Residential care provision

4.106 With the projected increase in the ageing population, allied to the development of both Supported Living arrangements for adults with Learning Disabilities and Mental Health Conditions, and the ongoing roll out of the Transforming Care programme for those with highly complex needs arising from Learning Disabilities and Autism, Staffordshire County Council has identified the need to increase the choice of housing and support options for young people and adults with a range of additional support needs and long term health conditions. Schemes will vary though the plan period with Staffordshire County Council continuing to assess ongoing need and leading on the commissioning of such provision. Any relevant strategic schemes will be included in the IDP as the plan period progresses. Any new schemes will be notified well in advance as (due to the complex needs of the clients in most cases) accommodation and support needs will need to be very carefully planned. Finance for these schemes will come from the County Council for the most part, leveraging private sector investment from suitable care providers.

Arts and Cultural Facilities

4.107 Arts and cultural facilities have been included under the 'health and wellbeing' subtitle due to their role in bringing communities together as described in chapter 10 of the Local Plan. However they could just as easily be included under tourism and the local economy. Notwithstanding this, a need has been identified for exhibition space to serve the District as no dedicated space is currently available. No costings are available presently as this depends upon whether the facility is to be a new building or reuse of premises. In addition there is a desire for public art to be incorporated into new developments and this is expressed through the Concept Statements associated with the Strategic Development Allocations.

4.108 As mentioned under 'community facilities' Burntwood Town Council has identified a shortfall in provision for arts and culture locally.

4.109 Support should also be given to a range of other facilities and amenities as the plan period progresses which help to support the delivery of arts and culture, and other recreational activity across the District. Such assets and facilities could range from school and village halls and places of worship, parks and gardens, to more purpose built community centres, arts studios and workshops and more informal meeting places.

Indoor Sports Provision

4.110 Facilities Planning Modelling (2010) identified the need for improved or new indoor sports provision to serve Lichfield City and the surrounding areas, hence its strategic significance as an infrastructure project. The need was highlighted for a six lane 25m swimming pool plus learner pool and either a four or six court sports hall, depending on whether or not existing facilities can be more intensively used in the Lichfield City area.

4.111 Further work has since been undertaken⁽ⁱⁱⁱ⁾ to determine how this could be achieved in terms of using facilities more efficiently and considering what additional investment would be required. The report concluded that the following priorities should be taken forward:

- Refurbishment of existing sports hall at Friary Grange Leisure Centre (£400k).
- Redevelopment and extension of Friary Grange Leisure Centre. Infrastructure requirements include additional new training and teaching pool changing facilities, plant room and spectator facilities £735,000 and an additional sports hall, gym, aerobic facilities and dry changing facilities £765,000.
- Development of a new 4-court sports hall at Netherstowe School (£2.8m).

Playing Pitches

4.112 The Playing Pitch Strategy has analysed local need, demand and potential participation rates relating to the main sports played in Lichfield District (football, rugby, cricket, hockey, tennis and bowls) and identifies areas of shortfall, of under-use and areas where provision could be improved. Some improvements are specifically to serve local communities and this is covered in the Local Infrastructure chapter.

4.113 Investment in other playing pitch facilities, however, serves a much more strategic need as many facilities serve a number of clubs and organisations. The strategy aims to ensure that there are sufficient pitches and courts to cater for demand for both matches and training, that facilities are of the required quality and to facilitate club development and participation at all levels.

4.114 At the strategic level, the Playing Pitch Strategy concludes that:

- In terms of the quality of football provision, this could include the provision of new or improved changing facilities, better investment and maintenance regimes, developing small stadia facilities when the standard of play reaches such a level that these are needed, and potential flood lighting at clubs to facilitate training;
- Cricket facilities need improved training provision (Burntwood and Kings Bromley) and changing facilities;
- Rugby clubs need support for the provision of new facilities, or the improvement of existing facilities and to expand or relocate when appropriate: there are particular pressures upon existing facilities at Burntwood RUFC;

- Hockey facilities should be supported in terms of additional provision subject to a clear business case, and in terms of improving existing pitches and facilities;
- Bowling provision should focus upon improving the quality of existing provision, with any additional facilities being provided in the Lichfield South and East and Tamworth Housing Market Area to match the areas of higher participation and to meet gaps in accessibility;
- In terms of tennis, work with the Lawn Tennis Association (LTA) is required to ensure that the merger of Lichfield Lawn Tennis Club and the Friary is not detrimental to the development of tennis in the District. Lichfield Lawn and Friary Tennis Clubs merged in 2012, and are now called Lichfield Friary Lawn Tennis Club. The District Council's Sport Development services has provided support with club development in particular, aiding access to local schools in order to promote and grow the junior section. In conjunction with this the Sports Development services are also working with partners to develop community provision at Beacon Park.

4.115 Standards for playing pitch provision are set out in the Local Plan Strategy (Development Management Policy HSC2).

4.116 The costs to deliver a playing pitch depends upon the site in question, land conditions, topography and other local circumstances. Overall it is preferable to concentrate facilities on multi-pitch sites where possible.

4.117 Although the Playing Pitch Strategy focuses upon the main sports which are played within the District, other sporting and recreational facilities should also be supported where appropriate to ensure that all of the District's residents, employees and visitors have a wide range of opportunities to participate in sport and physical activity which suits their needs, interests and ability. The District Council Physical Activity and Sports Strategy 2016-2020 focuses on encouraging people in Lichfield District to lead more active lives, achieving this will mean that there will be a positive contribution in terms of wider quality of life outcomes. The strategy subscribes to the key principle outlined in 'Everybody active, every day' which notes that to deliver change is not necessarily about new investment – it is more about maximising the potential of existing assets and resources. This relates to both existing investment and also assets such as open spaces, streets, parks, leisure facilities, community halls, schools and workplaces.

Community Safety

4.118 The Lichfield District Community Safety Delivery Plan was adopted in 2015 and runs until 2018. Its delivery it is supported by the Lichfield District Community Safety Assessment which provides the Community Safety Partnership and the Office of the Police Crime Commissioner.

4.119 The documents key aims and priorities include:

- Increasing feelings of safety
- Support vulnerable members of the community

- Target high crime areas including businesses
- Reduce the impact of the misuse of alcohol and other substances
- Maximise impact of building resilient families and communities
- Reducing re-offending

4.120 A review of the document is currently underway with adoption planned for 2017. No infrastructure requirements have been identified as part of the review process.

4.121 Work has commenced on site in relation to the deliver of a new Police Station to serve Lichfield and Burntwood. The new facility located at the corner of Stafford Road and Eastern Avenue Lichfield will replace dated facilities currently located at Frog Lane. The need for the relocation has been generated following the approval of the Friarsgate planning application, the site of which incorporates the existing Frog Lane facility.

4.122 As part of our commitment to delivering a council that is “Fit For The Future” a staff and member working group was set up to consider the possibilities for the delivery of CCTV surveillance across the District. After extensive consideration the group recommended in 2016 that the service levels should remain as they were. They did not consider that it would be appropriate to reduce the levels of coverage but neither did they consider that there was a requirements to increases need at this time.

Summary Table

Table 4.3 Strategic Social & Community Infrastructure: summary of improvements needed which will arise either directly, indirectly or cumulatively as a result of development impacts

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Housing				
A range of housing and accommodation to meet identified needs in line with Local Plan policies H1 and H2 including: <ul style="list-style-type: none"> • Affordable housing • Housing to meet the varied needs of the ageing population • Provision for gypsies, travellers and travelling showpeople • Care facilities including elderly care, and residential care facilities for children and young people 	Will vary	Sources will vary: combination of private, and public sector, grant aid, developer contributions (S106). Levels of affordable housing to be determined by Local Plan Policy H2.	Throughout plan period in line with trajectory	Mainly developers but schemes will vary.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Education and skills				
Primary Education	New schools required for East of Lichfield (Streethay) Deans Slade Farm and South Lichfield SDAs, and a new school and extended facility to serve Fradley and Rugeley Power Station Site. Details set out under Local Infrastructure to prevent double-counting and duplication.	Developer Contributions as set out within the Regulation 123.	See Local Infrastructure in relation to SDA schools	Staffordshire County Council
Secondary education and post - 16 education (NB Primary school needs are covered under 'local infrastructure').	£22m for schools serving Lichfield and its catchments.	Combination of public sector funding and developer contributions (CIL) for secondary education.	22 FE by 2019 Up to 25 FE by the end of plan period	Staffordshire County Council
Community provision and community safety				
Community provision - detailed area and site specific proposals covered under 'local infrastructure' but also included here to allow new community proposals to emerge over the plan period. Likely to include provision for the voluntary sector, increased police presence in communities, arts and cultural facilities, childcare provision, care schemes, community safety schemes including those which address designing out crime and crowded places, etc.	Will vary. Some details included in Local infrastructure section eg community facilities in line with SDAs	Sources will vary: may include developer contributions, mainly CIL	Throughout plan period	Parish and Town councils in partnership with community / voluntary sector
Health, sport and recreation				
Health centres / improvements to address capacity and access - covered under Local	See Local Infrastructure	See Local Infrastructure	See Local Infrastructure	See Local Infrastructure

4 Strategic Infrastructure

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Infrastructure (Burntwood and Fradley). Fazeley may need investment - to be determined at land allocations stage.				
Improvements to indoor sports facilities to serve Lichfield City and the surrounding rural communities.	<p>£4,739,000, of which:</p> <ol style="list-style-type: none"> 1. Friary Grange Leisure centre redevelopment £786,000 2. Friary Grange additional Pool £1m 3. Netherstowe - new 4 court hall £2,924,000 	Public funding and developer contributions (CIL) for funding shortfall.	Medium term.	Lichfield District Council
Improvements to playing pitch provision in line with the Playing Pitch, Tennis and Bowls Strategy (also includes cricket, football, hockey, rugby) and other playing pitch proposals as evidenced by local communities. Specific areas of deficiency or need are highlighted under 'Local Infrastructure'.	Schemes will vary.	Depending on the scheme, funding from clubs, public bodies, grant aid, developer contributions see regulation 123 list for details	Ongoing throughout plan period	Lichfield District Council in partnership with parish and Town Councils, and local clubs and organisations.
Improvements to open space provision in line with the Open Space Assessment (see also 'Green Infrastructure') to include equipped play, informal play and amenity green space. Specific areas of deficiency or need are highlighted under 'Local Infrastructure'.	<p>Schemes will vary however the following can be used as guide for cost per metre</p> <p>Play = £92 m2</p> <p>Amenity Green Space = £21 m2</p> <p>Natural/semi natural greenspace = £0.39 m2</p>	Depending on the scheme, funding from grant aid, public bodies, developer contributions see regulation 123 list for details.	Ongoing throughout plan period	Lichfield District Council in partnership with Parish and Town Councils.

Strategic Green Infrastructure

4.123 Natural England defines Green Infrastructure as '*a strategically planned and delivered network of high quality green spaces and other environmental features. It should be designed and managed as a multi-functional resource, capable of delivering a wide range of environmental and quality of life benefits for local communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens*'.

4.124 During 2016 the District Council adopted the Trees, Landscaping and Development SDP the document addresses the retention, protection and incorporation of trees, hedgerows and woodlands as part of a sustainable development and the provision new green infrastructure through design and in particular landscape features. The Biodiversity Development SDP details Lichfield District Councils requirements for applicants to build nature conservation features into developments, ensuring that a measurable net-gain to the districts biodiversity is always achieved. In addition the Biodiversity Strategy is currently being developed with adoption planned for 2017.

4.125 There is an overall need to improve the District's Green Infrastructure in terms of particular locations, and improving linkages between sites. In some areas there are specific deficiencies, and, where evidence is available and specific solutions have been suggested these are detailed under the 'Local Infrastructure' section.

4.126 The following paragraphs detail specific strategic need based on current available evidence.

Open Space

4.127 The Open Space Assessment was reviewed in late 2016, the document covers the following categories:

- Provision for children and young people (equipped play, and less formal play)
- Amenity green space (for informal activity close to home or work)
- Natural / semi natural green space
- Parks and gardens
- Green corridors (such as walkways and cycleways)
- Water spaces (such as lakes)
- Allotments (for growing own produce)
- Cemeteries and churchyards
- Civic spaces (providing the setting for public and community events, including theatres, religious and other cultural venues).
- Urban Fringe

4.128 The Open Space Assessment identifies and reviews existing infrastructure in terms of quantity, quality and accessibility and goes on to identify areas of shortfall within the context of Local Plan Strategy HSC1: Open Space Standards. Shortfalls identified through the the strategy are identified within the local infrastructure section of this document.

Stowe Pool

4.129 Stowe Pool and Fields are a key valuable cultural, historical and natural resources which is in need of investment in order to restore the site's infrastructure and historic assets. The site is identified in the Local Plan Strategy as significant green infrastructure and Lichfield District Councils Strategic Plan commits to placing particular importance on its restoration. The improvements will bring the site up to the same quality as other sites within a linear park network that were restored through the Historic Parks project. Public consultation was completed during the summer of 2016 and it is envisaged that a funding application will be submitted to the Heritage Lottery Fund in 2017.

Sport and Recreation

4.130 Playing pitches and other recreational facilities form part of the Green Infrastructure network, and requirements are considered under 'Social and Community' infrastructure.

Cannock Chase Area of Outstanding Natural Beauty and the Cannock Chase SAC

4.131 Designated in 1958 the Cannock Chase AONB under the National Parks and Access to Countryside Act 1949 it covers an area of 26 square miles and is designated as an AONB because of its beautiful landscape, its history and its wildlife.

4.132 The Cannock Chase AONB contains a Special Area of Conservation (SAC): a strictly regulated site protected by the European Habitats Directive and designated principally for its heathland habitat. Research has shown that 75% of all visitors to the Cannock Chase SAC are from within a 15km radius of the SAC. In the absence of mitigation, the planned level of residential growth within a 15 kilometre radius from the edge of Cannock Chase SAC is likely to have a significant effect on the SAC. The greater part of this effect would arise from development within a 0-8km zone as it has been determined through research that this zone would contribute the most visitors to the SAC. Lichfield District Council will need to provide measures for mitigating the impact of development upon the SAC in line with Policy NR7 of the Local Plan.

4.133 A Cannock Chase SAC Partnership (of which Lichfield District Council is a partner) has been formed and has developed a programme of mitigation (Strategic Access Management and Monitoring Measures (SAMMM)) which forms the basis of a developer contributions scheme. This provides simplicity for planners and developers providing a consistent approach to the protection of the SAC from the significant effects of residential development contained in the Local Plans within 15km of the boundary of the SAC through the delivery of the SAMMM.

4.134 The District Council has adopted a 'Cannock Chase Special Area of Conservation (SAC) Guidance to Mitigate the Impact of New Residential Development' in March 2015 which sets out a mechanism for the calculation of developer contributions. This document details how sufficient mitigation can be delivered to ensure that planning decisions made by the District Council do not result in adverse effects on the integrity of the SAC. The current cost of £1.97 million for SAMMM measures necessary to enable the delivery of the planned housing provision. Currently this authority and the Cannock Chase SAC partnership to only require a financial contribution where a new residential property is within a 0-8km zone of

the Cannock Chase SAC. Planning obligations associated with the SAC will be secured through combination of CIL funds and Section 106 obligations the detail of which is contained within the Regulation 123 list.

4.135 Other forms of development within the 0-15km zone which may give rise to additional visits to Cannock Chase SAC may need to carry out a Habitats Regulations Assessment (HRA). Participation in the developer contributions scheme is optional and applicants will need to conduct their own HRA if they do not wish to participate.

Central Rivers Initiative

4.136 The Central Rivers Initiative is a partnership project to develop a network of thriving water based parks and nature reserves along the Trent and Tame river corridors , along with complementary infrastructure projects for example viewing towers, linked viewing areas and river trail, marina and hotel facilities and improved retail access. The partnership is between Staffordshire County Council, Lichfield District Council, Tamworth and East Staffordshire Borough Council, private Landowners, The National Forest, Canal and River Trust, Sport Across Staffordshire and Stoke-on-Trent, RSPB and Staffordshire Wildlife Trust. The project is likely to be ongoing throughout the plan period as opportunities arise. Funding will be via mineral companies, developer contributions, national Forest Company incentives, Environment Agency, Heritage Lottery Fund, Forestry Commission and Natural England Higher Level schemes. The IDP will be updated as the project progresses.

4.137 The ‘Transforming the Trent Valley’ Landscape Partnership Scheme has 36 environmental, cultural and community-led projects based primarily on the CRI area with extensions into the middle reaches of Trent catchment in Staffordshire and Derbyshire.

4.138 This has culminated in an application to HLF for £2.7 million funding of a £4.9 million costed scheme, stage one approval was given late 2016. Not all of this project has an infrastructure priority but the project includes linking rivers and canal corridors, cycle paths and walking routes.

Chasewater Country Park

4.139 Significant infrastructure requirements are required to Chasewater Country Park in terms of maintenance, enhancement of landscape, protection of natural resources and the historic environment, promotion of public access and understanding of the countryside. Much of the site is a designated Site of Special Scientific Interest. In terms of heathland management, the site is a Higher Level Scheme (HLS) under the Defra administered Environmental Stewardship scheme which runs from 2007 to 2017. The five primary objectives of this scheme are:

- Wildlife conservation;
- Maintenance and enhancement of landscape quality and character;
- Natural resource protection;

- Protection of the historic environment;
- Promotion of public access and understanding of the countryside.

4.140 A wider programme of improvements to Chasewater Country Park, including creating and enhancing cycling/walking routes, improved signage and interpretation, improvements to play and fitness provision, improvements to facilities for people with mobility problems, development of a canopied seating area and a community facility are proposed by Staffordshire County Council who own the site.

River Mease Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI)

4.141 A River Restoration Plan has been developed for the River Mease and Gilwiskaw Brook to help achieve the objectives of the Habitats Directive and the Water Framework Directive, which are pieces of European legislation that aim for SAC rivers 'to achieve favourable condition and good ecological status respectively.

4.142 The Habitats Directive requires the potential effects of spatial and land use plans (ie Local Plans) on European sites such as the River Mease SAC to be assessed. The Developer Contribution Scheme (DCS) is the result of this assessment and provides a strategic approach to off-setting the negative effects of development.

4.143 All new housing and commercial development which contributes additional wastewater (and therefore phosphate) through a sewage treatment works which discharges into the River Mease catchment will have a direct impact on water quality and will be required to provide developer contributions or undertake appropriate mitigation.

4.144 A number of projects, some taken from the River Restoration Plan are to be delivered within the first development window of the DCS (which equates to the removal of 700g/phosphate per day). Additional actions within this first development window also include the delivery of one silt trap and education.

4.145 Due to development pressures in other local authority areas within the River Mease catchment a second development window (DCS2) has been developed 2016 with the river restoration schemes scheduled to remove 329g phosphate per day. Measures for mitigating the impact of development on the River Mease SAC are currently secured through S106 planning obligations.

Restoring the Lichfield Link: heathland projects

4.146 The sustainable management of heathland across the District is a key priority. In addition to the works outlined at Chasewater County Park including Wharf Lane (above), heathland management schemes have been secured at Muckley Corner (Wall Butts Common), pipehill Crossroads (pipe Hill Heathlands or Pipe Marsh Common) and Ironstone Road heathland. These, together with funding sources, are set out in the table later in this chapter. One of the key elements of the overarching project is to increase and improve green infrastructure links in relation to heathland across the District.

Canals

4.147 A review of canal conservation areas to ensure appropriate enhancements and protection of inland waterways is scheduled to take place by 2018. Once completed, this will show any potential areas of enhancement and the IDP will be updated accordingly.

4.148 The restoration of Lichfield and Hatherton Canals is being led by the Lichfield and Hatherton Canal Restoration Trust. The Lichfield Canal project is estimated to cost up to £50m in total and is likely to be implemented post 2016 in five phases. A package of funding will be required and possible sources of funding are likely to include developer contributions, the David Suchet Appeal, Member contributions, The Inland Waterways Association and other possible grant funding.

Woodlands and hedgerows

4.149 Improvements to woodland and hedgerow areas and habitats for priority protected species, and the creation new woodlands, hedgerows and habitats for priority protected species will be addressed throughout the plan periods as opportunities arise.

National Forest

4.150 The creation of new woodlands, other habitats and access enhancements are proposed within The National Forest. The delivery will be led by the National Forest Company and funding will be via the National Forest Company grants and the Countryside Stewardship Scheme, developers and minerals companies. The project will be delivered through the plan period and the IDP will be updated as the project progresses.

Local Nature Reserves

4.151 Due to the transfer of management of Gentleshaw Common SSSI to Staffordshire Wildlife Trust the District Council will no longer seek to declare this site as a Local Nature Reserve in the short Term. 17 hectares of open space will to be declared over the plan period as a Local Nature Reserve (LNR) this includes Christian Fields, Muckley Corner Common, Pipehill Common and the at Ironstone Heaths.

Summary Table

Table 4.4 Strategic Green infrastructure: summary of improvements needed which will arise either directly, indirectly or cumulatively as a result of development impacts

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Open Space - general				
Improvements to open space provision in line with the Open Space Assessment, and evidence from local communities. Specific areas of deficiency or	Costs will vary	Sources will vary: public, private, grant aid, developer contributions see Regulation 123 list for details.	Throughout plan period.	Implementation will vary although the strategic framework is set by Lichfield District Council.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
need are highlighted under 'Local Infrastructure'.				
Stowe Pool and Fields				
Restoration of Stowe Pool and Fields Secured S106, HLF funding		2018-2020		£1m Lichfield District Council
Lichfield District Council				
Cannock Chase Area of Outstanding Natural Beauty				
Measures for mitigating the impact of development upon the Cannock Chase Special Area of Conservation (SAC).	£1,970,000	Sources will vary but mainly developer contributions (S106 / CIL) see Regulation 123 list for details	Throughout plan period to align with trajectory.	Cannock Chase SAC Partnership
Support for wider AONB management including to surrounding landscapes and habitats to create a more functional ecological network	TBC	Developer Contributions see Regulations 123 list for details other grant funding sources	Throughout plan period to align with trajectory.	AONB Partnership and LNP
Central Rivers Initiative				
Network of water based parks and nature reserves along the Trent and Tame river corridors with associated projects such as walkways, cycleways, viewing towers, linked viewing areas, river trail etc	£940,000.00 (a percentage of which will benefit from the HLF application.)	HLF Stage One Application has received approval HLF for £2.7 million funding of a £4.9 million costed scheme. Sources vary e.g. mineral companies, National Forest Company incentives, Environment Agency, Forestry Commission, Natural England Higher Level	Throughout plan period	Central Rivers Initiative

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
		schemes, Developer Contributions (S106 / CIL)		
River Mease SAC (Special Area of Conservation) and SSSI				
River Restoration Plan	£640,00 within the catchment. No projects to be delivered within Lichfield District.	Developer Contributions S106	Throughout plan period	LPAs
Chasewater Country Park				
Measures to ensure Chasewater Country Park SSSI is brought into and maintained in a favourable condition	£460,000	Higher Level Stewardship Scheme Develop Contribution, Public Sector, Private Sector, Grant aid	Prior to 2018 Higher Level Stewardship Scheme, other improvements beyond this date	SCC
Continuous improvements to Chasewater County Park including infrastructure facilities, promotion of public access and understanding of the natural environment	£200,000	Developer Contributions Public sector Private sector Grant aid	Throughout plan period	SCC
Heathland				
Table 4.5 Restoring the Lichfield Link programme for sustainable heathland management across the District.	1. £111k 2. £59k	1. £84K S106 biodiversity offsetting, £20k other developer contributions secured,	Short to medium term.	Lichfield District Council in partnership with the voluntary sector and others.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
<ol style="list-style-type: none"> 1. Muckely Corner Common 2. Pipehill Common 3. Ironstone Road 4. Wharf Lane SSSI 5. 4.1ha other heathlands projects. 	<ol style="list-style-type: none"> 3. £93k 4. 76K 5. £182k 	<ol style="list-style-type: none"> £7k community forest grant. 2. £59k S106 biodiversity offsetting. 3. £93k S106 biodiversity offsetting. 4. Higher level Stewardship 5. £182K S106 biodiversity offsetting 		
Canals				
General improvements to the canal network to improve green infrastructure links e.g. towpaths, walking and cycling routes, biodiversity. Review of canal conservation areas	Costs will vary.	Sources will vary: grant aid, public and private funding, developer contributions (CIL)	Throughout plan period	Will vary depending on the project but Lichfield District Council to provide the strategic context in partnership with others.
Restoration of the Lichfield Canal incorporating the Heritage Twopath Trail as a safe traffic-free community link - with the exception of works directly connected to the SDA's to the South Lichfield.	Up to £50m	Lichfield District Council, Canal Conservation, David Sweet Appeal, Inland waterways Association, grant funding, possible developer contributions	Medium to long term	Implementation to be led by Canal & Rivers Trust Restoration Canal Trust.
Woodlands and hedgerows				
Increasing and improving woodlands, hedgerows and habitats for priority protected species across the District.	Costs of schemes will vary	Grants, private and public funding, possible developer contribution See Regulation 123 list for details.	Ongoing throughout plan period	Lichfield District Council in partnership with others.
National Forest				

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
The National Forest	Will vary	National Forest Company grants, minerals companies and the Countryside Stewardship Scheme, Developer contributions See Regulation 123 list for details.	Ongoing throughout plan period.	The National Forest Company
Local Nature reserves (LNR)				
Achieve 17ha LNR open space across the District and develop infrastructure to support this. Christian Fields declared an LNR, Muckley Corner due to be declared an LNR 2014/15 Gentleshaw Common in 2015/16.	See Heathland projects re Muckley Corner and Gentleshaw Common	Funding secured to enable declaration of LNRs / habitat management (see under 'heathland projects') but further funding required to improve access, security (e.g from illegal use by motor vehicles), on site information etc. Developer contributions see Regulation 123 list for details and other grant funding streams.	Short term	Lichfield District Council in partnership with others.

5 Local Infrastructure Needs

5.1 This chapter sets out the infrastructure needs which relate specifically to local communities. It is divided up into needs which relate generically to each settlement, and those needs which relate specifically to the Strategic Development Allocations (SDAs), Broad Development Location (BDL) and the Rugeley Power Station allocation.

5.2 It should be noted that, developer contributions references differ to takes into consideration when planning approval was gained, the adoption of CIL and the related version of the the Regulation 123. The current version of the Regulation 123 list can be can be viewed at Appendix E.

5.3 Previous iterations of the IDP have provided individual housing trajectories for each SDA's referencing the assumed delivery rates identified within the relevant Local Plan Strategy Concept Statements. To enable an up to date picture of delivery timesclaes to be present this information has been replaced with the Housing Trajectory provide within Appendix D of the the Local Plan Allocations Document. The Local Plan Allocation Housing Trajectories have been reproduced within the IDP at Appendix F.

5.4 A number of the SDA's have commenced works on site and are at various phases of delivery. It is therefore possible that individual elements of infrastructure have been fully delivered or that a number of elements are currently partly delivered. This position is extremely fluid and therefore until the allocations have been completed delivery the relevant site specific infrastructure needs tables (below) will continue to list the full infrastructure requirements.

Lichfield City

5.5 Lichfield City's non site-specific infrastructure needs are covered primarily in the Strategic Infrastructure chapter (for example leisure, transport and town centre development) some of which have been identified by the City Centre Strategy which has been prepared in partnership with a range of organisations relating to Lichfield City. In the future, more localised issues may be set out in a Neighbourhood Plan. In terms of open space requirements, reference can be made to the details contained within the Open Space Assessment 2016, and in terms of playing pitch, tennis and bowls provision, the Playing Pitch, Tennis and Bowls Strategy 2012 should be utilised.

South of Lichfield Strategic Development Allocation

5.6 450 homes will be delivered to the South of Lichfield. Development has not yet commenced on site.

5.7 The following infrastructure is needed to serve the site and to ensure that it links to its surroundings effectively (in addition to contributions to the provision of strategic infrastructure).

Table 5.1 South of Lichfield SDA site specific infrastructure needs.

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
Physical Infrastructure				
Developer to deliver on-site section of the bypass from London Road to the railway embankment, (also protecting the route of the Lichfield Canal), through S278 agreement and as part of wider scheme to complete the bypass (see Strategic Infrastructure). Design of the internal road network to accord with the Manual for Streets.	See Strategic Infrastructure section	Developer / S106 or S278 (in relation to onsite works), bypass completion involving underbridge construction is a wider scheme not just related to this SDA) See Strategic Infrastructure Section	Work to begin at outset of development to allow for construction traffic to access the site.	Developer with Staffordshire County Council
Enhance bus routes and increase frequency of services to provide a convenient and well designed service connecting all new neighbourhoods and provide links into Lichfield City Centre and local railway stations. All proposed development should be within 350m of a bus stop. Two new 20 minute frequency bus services are required to link the new South of Lichfield allocation (s) to the city centre to ensure linkages to existing bus station, Train Stations local shops and education provision.	Will vary	Developer with Staffordshire County Council and service providers.	Alongside first occupation	Developer with Staffordshire County Council and service providers.
Cycle and pedestrian movement to be direct, safe, convenient, attractive and overlooked and will be supported by an internal network of green corridors to link to those beyond the development and allow for access to the countryside and to Lichfield City Centre. Integration of safer cycle and pedestrian routes to existing and proposed schools, to encourage walking and cycling for young people will be a priority.	Will vary	S106	Prior to first occupation	Developer with Staffordshire County Council
Smarter Travel Choices will be promoted to ensure residents are aware of the options available to them to reduce car usage.	Will vary	See Strategic Infrastructure (transport)	Alongside occupation	Developer with Staffordshire County Council
Measures to address water supply and waste water treatment (see Strategic Infrastructure).	Will vary - see Strategic Infrastructure	See Strategic Infrastructure	To be agreed between developer and utilities companies.	Developer with South Staffs Water and Severn Trent Water.

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
Relocation / provision of existing utilities infrastructure	Will vary	Developer and utilities companies	To be agreed between developer and utilities companies.	Developer with utilities companies.
Provision of any necessary flood mitigation measures, the provision of sustainable drainage and a sustainable management strategy for the maintenance of these.	Costs will vary	Developer, possibly S106 depending on design of scheme.	Alongside construction	Developer with Environment Agency.
Measures for mitigating the impacts of the adjacent railway line will be incorporated.	Costs will vary	Developer	Alongside construction	Developer
High speed broadband shall be incorporated within new developments.	Will vary	Developer	Alongside construction	Developer
Social and Community Infrastructure				
A mix of house types, sizes and tenures and an appropriate level of affordable housing in accordance with Development Management policies H1 and H2 of the Local Plan. The affordable housing shall include a mix of tenure to meet housing needs and will be pepper-potted within the development and shall be indistinguishable from open market housing.	Cost will vary	Will vary - developers, public funding, S106, grant funding, Registered providers, housing associations, charitable bodies etc.	As part of the the delivery	Developer in partnership with other organisations as applicable.
New primary school, one Form Entry (FE) providing for 210 places plus nursery provision. This requires a site of 12,000m ² and must be in a location accessible by public transport and cycle / pedestrian routes. Additional land is being sought by SCC to provide future flexibility, to enable a further 1FE expansion to be accommodated. The development will be required to make a financial contribution towards the build cost of a 1FE school and provide 2 hectares of land for education purposes. The additional land will be required to create a larger school, which will incorporate the need arising from the Cricket Lane Site and to address the wider planned housing growth in the south of the city.	£4.256m (1FE)	S106 and Staffordshire County Council	Phasing / trigger points to be agreed with Staffordshire County Council	Developer with Staffordshire County Council
Community centre to be delivered as part of a community 'hub' and potentially linking to the school in line with details set out under 'strategic infrastructure'.	£800,000	S106.	Alongside development of the site.	Developer in partnership with Lichfield District Council and / or City Council.
New community 'hub' to be provided within the Central Neighbourhood Area to include classes A1 to A5 of the General Permitted	Cost will vary	Developer.	Alongside development of the site.	Developer.

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
Development (Amendment) order 2005. The hub must also incorporate, or be adjacent to, facilities which can be used for playing pitches, sport and recreation.				
Playing pitches and changing / pavilion space to be provided at a minimum level of 1.23ha per 1000 population in line with Development Management policy HSC2. For this site this is 1.27ha min.	Will vary	S106	Alongside development of the site, with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council, City Council and local sports clubs and organisations as applicable.
Equipped play area to be provided in a safe and accessible location, to ensure that all parts of the development are within 480m / 10 minutes walk time of an equipped play facility in line with Development Management Policy HSC1.	Will vary	S106	Alongside development of the site, with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Lichfield City Council.
Amenity Green Space to be provided at a minimum rate of 1.43ha per 1000 population and to ensure all residents are within 480m / 10 minutes walk time of an amenity green space in line with Development Management Policy HSC1. For this site this is 1.48ha min.	Will vary	S106	Alongside development of the site, with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Lichfield City Council.
New allotment space to be provided at a minimum rate of 1 plot (150sq.m.) per 32 households in line with Development Management Policy HSC1. For this site this is 14 plots min.	Will vary	S106	Alongside development of the site, with an ongoing programme for management.	Developer in partnership with Lichfield District Council and Lichfield City Council and Allotments Society.
Contributions to secondary / post 16 education, and improved leisure facilities for Lichfield City as detailed under 'Strategic Infrastructure'.	See Strategic Infrastructure	CIL (see Strategic Infrastructure)	See Strategic Infrastructure.	See Strategic Infrastructure.
Public art to be a feature of the development	Will vary	S106	By completion	Developer in partnership with Lichfield District Council and Lichfield City Council and local arts organisations.
Green infrastructure				
All new landscaping must assist in assimilating this development into the wider landscape and topography.	Will vary	Developer	Alongside development of the site, with an ongoing programme for maintenance.	Developer

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
A continuous open space network must be provided along the course of the Lichfield Canal route giving access to future waterside recreation uses. The linear form of this corridor will be opened up in places to provide public amenity space. Works to include the provision of a new road bridge over the lowered canal channel, a section of new canal channel and any further necessary works to facilitate its integration with a wider open space and green infrastructure network. Opportunity for surface water management into the canal channel to discharge downstream.	Will vary	S106/CIL where applicable See Reg 123 list.	Alongside development of the site, with an ongoing programme for maintenance.	Developer working with the Lichfield Canal Restoration Trust
A network of green spaces will be integrated into the development to reflect the standards set out in Development Management Policies HSC1 and HSC2 (see also 'social and community' infrastructure). These need to be carefully designed to take into account natural surveillance and the amenity of neighbouring residents.	Will vary	Developer / S106	Alongside development of the site, with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
Areas of biological interest or grassland habitat will be protected and, where possible integrated as part of the open spaces network.	Will vary	Developer / S106	Alongside development of the site, with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
Existing natural features, including quality hedgerows and significant trees will be incorporated within the layout. New landscaping and planting will be sited and selected to include sufficient tree canopy cover across the site to deliver landscape - related climate-change adaptation, urban cooling, shade and shelter and visually enhance the development. Parks, open spaces, streets and public areas must incorporate sufficient space above and below ground to enable large canopy trees to develop to maturity.	Will vary	Developer CIL / S106	Alongside development of the site with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
The development will include the retention and enhancement of existing quality hedgerows and significant trees and habitat within the site and to its edges.	Will vary	Developer / S106	Alongside development of the site, to be completed by 2019 with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Cricket Lane South of Lichfield Strategic Development Allocation

5.8 450 homes and around 12ha employment land will be delivered at Cricket Lane SDA. Development has not yet commenced on site.

5.9 The following infrastructure is needed to serve the site and to ensure that it links to its surroundings effectively (in addition to contributions to the provision of strategic infrastructure).

Table 5.2 Cricket Lane South of Lichfield site specific infrastructure needs

Infrastructure Requirement Cricket Lane SDA	Cost	Funding	Phasing	Delivery Lead
Physical Infrastructure				
Enhance bus routes and increase frequency of services to provide a convenient and well designed service connecting all new neighbourhoods and provide links into Lichfield City Centre and local railway stations. All proposed development should be within 350m of a bus stop.	Will vary	Developer with Staffordshire County Council and service providers.	Alongside first occupation	Developer with Staffordshire County Council and service providers
Cycle and pedestrian movement to be direct, safe, convenient, attractive and overlooked and will be supported by an internal network of green corridors to link to those beyond the development and allow for access to the countryside and to Lichfield City Centre. Integration of safer cycle and pedestrian routes to existing and proposed schools, to encourage walking and cycling for young people will be a priority. Provision of safe crossing points for both London and Tamworth Roads.	Will vary	Developer and S106	Prior to first occupation	Developer with Staffordshire County Council
Design of the internal road network to accord with the Manual for Streets.	Will vary	Developer	Alongside first occupation	Developer with Staffordshire County Council
Smarter Travel Choices will be promoted to ensure residents are aware of the options available to them to reduce car usage.	Will vary	See Strategic Infrastructure (transport)	Alongside first occupation	Developer with Staffordshire County Council
Measures to address water supply and waste water treatment (see Strategic Infrastructure).	Will vary - see Strategic Infrastructure	See Strategic Infrastructure.	To be agreed between developer and utilities companies.	Developer with South Staffs Water and Severn Trent Water.
Relocation / provision of existing utilities infrastructure.	Will vary	Developer and utilities companies.	Prior to development taking place	Developer with utilities companies.
Provision of any necessary flood mitigation measures, the provision of sustainable drainage and a sustainable management strategy for the maintenance of these.	Costs will vary	Developer, possibly with CIL / S106 depending on design of scheme.	Alongside construction to commence at the beginning of delivery phase.	Developer with Environment Agency.
Measures for mitigating the impacts of the adjacent road network.	Costs will vary	Developer	Alongside construction to commence at the beginning of delivery phase,	Developer

Infrastructure Requirement Cricket Lane SDA	Cost	Funding	Phasing	Delivery Lead
High speed broadband shall be incorporated within new developments.	Will vary	Developer	Alongside construction	Developer
Social and Community Infrastructure				
A mix of house types, sizes and tenures and an appropriate level of affordable housing in accordance with Development Management policies H1 and H2 of the Local Plan. The affordable housing shall include a mix of tenure to meet housing needs and will be pepper-potted within the development and shall be indistinguishable from open market housing.	Costs will vary	Will vary - developers, public funding, S106, grant funding, Registered providers, housing associations, charitable bodies etc.	Throughout construction phase.	Developer in partnership with other organisations as applicable.
Playing pitches and changing / pavilion space to be provided at a minimum level of 1.23ha per 1000 population in line with Development Management policy HSC2. For this site this is 1.27ha min.	Will Vary	S106	Alongside development of the site, to be completed at full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council, Parish Council and local sports clubs and organisations as applicable.
Equipped play area to be provided in a safe and accessible location, to ensure that all parts of the development are within 480m / 10 minutes walk time of an equipped play facility in line with Development Management Policy HSC1.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Lichfield City Council.
Amenity Green Space to be provided at a minimum rate of 1.43ha per 1000 population and to ensure all residents are within 480m / 10 minutes walk time of an amenity green space in line with Development Management Policy HSC1. For this site this is 1.48ha min.	Will vary	Developers / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Lichfield City Council.
New allotment space to be provided at a minimum rate of 1 plot (150sq.m.) per 32 households in line with Development Management Policy HSC1. For this site this is 14 plots min.	Will vary	Developers / CIL or S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for management.	Developer in partnership with Lichfield District Council and Lichfield City Council and Allotments Society.

Infrastructure Requirement Cricket Lane SDA	Cost	Funding	Phasing	Delivery Lead
Further to table 5.1 (primary school), contribution towards expansion of the new primary school on the South of Lichfield SDA to 2FE	1FE at £23m	Developers / CIL or S106	Throughout construction phase.	Developer with Staffordshire County Council
Contributions to secondary / post 16 education, and improved leisure facilities for Lichfield City as detailed under 'Strategic Infrastructure'.	See Strategic Infrastructure	CIL (see Strategic Infrastructure)	See Strategic Infrastructure.	See Strategic Infrastructure.
Public art to be a feature of the development	Will vary	S106 or CIL	By full construction stage.	Developer in partnership with Lichfield District Council and Lichfield City Council and local arts organisations.
Green Infrastructure				
All new landscaping must assist in assimilating this development into the wider landscape and topography.	Will vary	Developer	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer
A continuous open space network must be provided along the course of the Lichfield Canal route giving access to future waterside recreation uses. The linear form of this corridor will be opened up in places to provide public amenity space. Works to include the provision of a new road bridge over the lowered canal channel, and any further necessary works to facilitate its integration with a wider open space and green infrastructure network.	Will vary	Developer / S106 And CIL where applicable	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer working with the Lichfield Canal Restoration Trust
A network of green spaces will be integrated into the development to reflect the standards set out in Development Management Policies HSC1 and HSC2 (see also 'social and community' infrastructure). These need to be carefully designed to take into account natural surveillance and the amenity of neighbouring residents.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
Areas of biological interest or grassland habitat will be protected and, where possible integrated as part of the open spaces network.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an	Lichfield District Council with developer and in partnership with others as applicable.

Infrastructure Requirement Cricket Lane SDA	Cost	Funding	Phasing	Delivery Lead
			ongoing programme for maintenance.	
Existing natural features, including quality hedgerows and significant trees will be incorporated within the layout. New landscaping and planting will be sited and selected to include sufficient tree canopy cover across the site to deliver landscape - related climate-change adaptation, urban cooling, shade and shelter and visually enhance the development. Parks, open spaces, streets and public areas must incorporate sufficient space above and below ground to enable large canopy trees to develop to maturity.	Will vary	Developer CIL / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
The development will include the retention and enhancement of exiting quality hedgerows and significant trees and habitat within the site and to its edges.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Deans Slade South of Lichfield Strategic Development Allocation

5.10 450 homes will be delivered to the South of Lichfield at Deans Slade. Development has not yet commenced on site.

5.11 The following infrastructure is needed to serve the site and to ensure that it links to its surroundings effectively (in addition to contributions to the provision of strategic infrastructure).

Table 5.3 Deans Slade South of Lichfield SDA site specific infrastructure needs.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Deans Slade SDA				
Physical infrastructure				
Enhance bus routes and increase frequency of services to provide a convenient and well designed service connecting all new neighbourhoods and provide links into Lichfield City Centre and local railway stations. All proposed development should be within 350m of a bus stop. Two new 20 minute frequency bus services are required to link the new South of Lichfield allocation (s) to the city centre to ensure linkages to existing bus station, Train Stations local shops and education provision.	Will vary	Developer with Staffordshire County Council and service providers.	Alongside first occupation	Developer with Staffordshire County Council and service providers

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Deans Slade SDA				
Cycle and pedestrian movement to be direct, safe, convenient, attractive and overlooked and will be supported by an internal network of green corridors to link to those beyond the development and allow for access to the countryside, local community facilities (linked to other nearby developments) and to Lichfield City Centre. Integration of safer cycle and pedestrian routes to existing and proposed schools, to encourage walking and cycling for young people will be a priority. Provision of safe crossing points linking to the commercial facilities, the South Lichfield SDA and the wider urban area.	Will vary	Developer and S106	Prior to first occupation	Developer with Staffordshire County Council
Contribution towards the delivery of the Lichfield Southern Bypass to connect to the wider development to the south of Lichfield.	See 'Strategic Infrastructure' for bypass details	Developer and S106 or S278	Alongside delivery of site	Developer with Staffordshire County Council
Design of the internal road network to accord with the Manual for Streets.	Will vary	Developer	Alongside first occupation	Developer with Staffordshire County Council
Smarter Travel Choices will be promoted to ensure residents are aware of the options available to them to reduce car usage.	Will vary	See Strategic Infrastructure (transport)	Alongside first occupation	Developer with Staffordshire County Council
Measures to address water supply and waste water treatment (see Strategic Infrastructure).	Will vary - see Strategic Infrastructure	See Strategic Infrastructure.	To be agreed between developer and utilities companies.	Developer with South Staffs Water and Severn Trent Water.
Relocation / provision of existing utilities infrastructure.	Will vary	Developer and utilities companies.	Prior to development taking place.	Developer with utilities companies.
Provision of any necessary flood mitigation measures, the provision of sustainable drainage and a sustainable management strategy for the maintenance of these.	Costs will vary	Developer, possibly with CIL / S106 depending on design of scheme.	Alongside construction to begin on commencement.	Developer with Environment Agency.
Measures for mitigating the impacts of the adjacent road and rail network.	Costs will vary	Developer	Alongside construction to begin on commencement.	Developer
High speed broadband shall be incorporated within new developments.	Will vary	Developer	Alongside construction	Developer
Social and Community Infrastructure				

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Deans Slade SDA				
A mix of house types, sizes and tenures and an appropriate level of affordable housing in accordance with Development Management policies H1 and H2 of the Local Plan. The affordable housing shall include a mix of tenure to meet housing needs and will be pepper-potted within the development and shall be indistinguishable from open market housing.	Costs will vary	Will vary - developers, public funding, S106, grant funding, Registered providers, housing associations, charitable bodies etc.	Throughout construction phase.	Developer in partnership with other organisations as applicable.
Playing pitches and changing / pavilion space to be provided at a minimum level of 1.23ha per 1000 population in line with Development Management policy HSC2. For this site this is 1.27ha min.	Indicative cost for a playing pitch between £60,000 and £100,000 depending on local circumstances. Changing block costs £250,000 (2 team) or £350,000 (4 team).	S106	Alongside development of the site, to be completed by 2026 with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council, Parish Council and local sports clubs and organisations as applicable.
Equipped play area to be provided in a safe and accessible location, to ensure that all parts of the development are within 480m / 10 minutes walk time of an equipped play facility in line with Development Management Policy HSC1.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Lichfield City Council.
Provision of a District Park to define the southern side of the development (to be retained within Green Belt), as defined in the concept statement for the SDA.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Lichfield City Council.
Amenity Green Space to be provided at a minimum rate of 1.43ha per 1000 population and to ensure all residents are within 480m / 10 minutes walk time of an amenity green space in line with Development Management Policy HSC1. For this site this is 1.48ha min. This needs to be considered in light of the provision of the District Park (see above).	Will vary	Developers / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Lichfield City Council.
New allotment space to be provided at a minimum rate of 1 plot (150sq.m.) per 32 households in line with Development Management Policy HSC1. For this site this is 14 plots min.	Will vary	Developers / CIL or S106	Alongside development of the site, to be completed by full construction	Developer in partnership with Lichfield District Council and

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Deans Slade SDA				
			stage with an ongoing programme for management.	Lichfield City Council and Allotments Society.
New primary school, one Form Entry (FE) providing for 210 places plus nursery provision. This requires a site of 12,000m ² and must be in a location accessible by public transport and cycle / pedestrian routes. This will provide for the needs generated by the site itself plus cumulative need in relation to development for Lichfield (See Strategic Infrastructure, Primary Education)	£4.256m	S106 and Staffordshire County Council	Phasing / trigger points to be agreed with Staffordshire County Council	Developer with Staffordshire County Council
Contributions to secondary / post 16 education, and improved leisure facilities for Lichfield City as detailed under 'Strategic Infrastructure '.	See strategic infrastructure	CIL (see Strategic Infrastructure)	See Strategic Infrastructure.	See Strategic Infrastructure
Public art to be a feature of the development	Will vary	S106	By full construction stage.	Developer in partnership with Lichfield District Council and Lichfield City Council and local arts organisations.
Green Infrastructure				
All new landscaping must assist in assimilating this development into the wider landscape and topography.	Will vary	Developer	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer
A continuous open space network must be provided along the course of the Lichfield Canal route giving access to future waterside recreation uses. The linear form of this corridor will be opened up in places to provide public amenity space. Works to include the provision of a new road bridge over the lowered canal channel and any further necessary canal channel works, to facilitate its integration with a wider open space and green infrastructure network.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer working with the Lichfield Canal Restoration Trust
A network of green spaces will be integrated into the development to reflect the standards set out in Development Management Policies	Will vary	Developer / S106	Alongside development of the site, to be completed	Lichfield District Council with developer and in

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Deans Slade SDA				
HSC1 and HSC2 (see also 'social and community' infrastructure). These need to be carefully designed to take into account natural surveillance and the amenity of neighbouring residents.			by full construction stage with an ongoing programme for maintenance.	partnership with others as applicable.
Areas of biological interest or grassland habitat will be protected and, where possible integrated as part of the open spaces network.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
Existing natural features, including quality hedgerows and significant trees will be incorporated within the layout. New landscaping and planting will be sited and selected to include sufficient tree canopy cover across the site to deliver landscape - related climate-change adaptation, urban cooling, shade and shelter and visually enhance the development. Parks, open spaces, streets and public areas must incorporate sufficient space above and below ground to enable large canopy trees to develop to maturity.	Will vary	Developer CIL / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
The development will include the retention and enhancement of exiting quality hedgerows and significant trees and habitat within the site and to its edges.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

East of Lichfield (Streethay) Strategic Development Allocation

5.12 750 homes will be delivered to the East of Lichfield. Development has commenced.

5.13 The following infrastructure is needed to serve the site and to ensure that it links to its surroundings effectively (in addition to contributions to the provision of strategic infrastructure).

Table 5.4 East of Lichfield (Streethay) SDA site specific infrastructure needs.

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
Physical infrastructure				
Two new junctions, accessed at either end of the existing settlement will be provided to serve the proposed development. The northern	To be confirmed between developer,	Developer	To be agreed	Developer with Staffordshire County

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
junction will be appropriately and safely designed so as not to restrict, and, where possible, improve the flow of traffic on to the strategic highway network (A38). Any measures will need to be modelled to ensure they are an effective solution and will be capable of delivery. The design of the internal road network to accord with the Manual for Streets.	Staffordshire County Council and Highways Agency.	S278 or S106	between the developer and Staffordshire County Council / Highways agency.	Council and Highways Agency.
The development will provide safe crossing points to allow for the safe movement of pedestrians and cyclists from within the existing settlements of Streethay to the SDA and its amenities, particularly with regard to the primary school, social and community facilities and green spaces.	Will vary. Indicative cost of a pedestrian crossing is around £60,000 but other options also to be considered.	S106	Prior to first occupation	Developer with Staffordshire County Council
Traffic management measures and pedestrian improvements on the A5127. Existing footpaths on Burton Road will be improved and widened where necessary to enhance the pedestrian linkages from the site to Lichfield Trent Valley Station.	To be confirmed between developer and Staffordshire County Council	S106 / S278	Prior to completion	Developer with Staffordshire County Council
Increased frequency and enhanced provision of bus services to provide a convenient and well designed service connecting all new neighbourhoods and providing links into Lichfield City Centre and local railway stations. All proposed development should be within 350m of a bus stop.	Will vary	Developer with service providers.	Alongside first occupation	Developer with Staffordshire County Council and service providers.
Cycle and pedestrian movement to be direct, safe, convenient, attractive and overlooked and will be supported by an internal network of green corridors to link to those beyond the development and allow for access to the countryside and to Lichfield City Centre. Integration of safer cycle and pedestrian routes to existing and proposed schools, to encourage walking and cycling for young people will be a priority. Linkages will be provided to the existing footbridge over the West Coast Main Line, and shall be integrated into the development to assist in the safe movement of pedestrians and cyclists into the City.	Will vary	S106	Alongside first occupation	Developer with Staffordshire County Council.
Smarter Travel Choices will be promoted to ensure residents are aware of the options available to them to reduce car usage.	Will vary	See Strategic Infrastructure (transport)	Alongside first occupation	Developer with Staffordshire County Council
Measures to address water supply and waste water treatment (see Strategic Infrastructure).	Will vary - see Strategic Infrastructure	See Strategic Infrastructure.	To be agreed between developer and utilities companies.	Developer with South Staffs Water and Severn Trent Water.

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
Relocation / provision of existing utilities infrastructure.	Will vary	Developer and utilities companies.	Prior to development taking place.	Developer with utilities companies.
Provision of any necessary flood mitigation measures, the provision of sustainable drainage and a sustainable management strategy for the maintenance of these.	Costs will vary	Developer, possibly with CIL / S106 depending on design of scheme.	Alongside construction to begin at commencement of construction	Developer with Environment Agency.
Measures for mitigating the impacts of the adjacent railway line will be incorporated.	Costs will vary	Developer	Alongside construction to begin at commencement of construction	Developer
High speed broadband shall be incorporated within new developments.	Will vary	Developer	Alongside construction	Developer
Social and Community Infrastructure				
A mix of house types, sizes and tenures and an appropriate level of affordable housing in accordance with Development Management policies H1 and H2 of the Local Plan. The affordable housing shall include a mix of tenure to meet housing needs and will be pepper-potted within the development and shall be indistinguishable from open market housing.	Costs will vary	Will vary - developers, public funding, S106, grant funding, Registered providers, housing associations, charitable bodies etc.	Throughout construction	Developer in partnership with other organisations as applicable.
New primary school, one or one and a half Form Entry (FE) providing for 210 to 315 places plus nursery provision. This requires a site of 12,000m ² to 16,700m ² and must be in a location accessible by public transport and cycle / pedestrian routes.	£4.256m-£5.5m	S106 and Staffordshire County Council.	Phasing / trigger points to be agreed with Staffordshire County Council	Developer with Staffordshire County Council.
Community Centre to be delivered as part of a community 'hub' and potentially linking to the school in line with the details set out under 'strategic infrastructure'.	£800,000	S106	Alongside development of the site to be completed by complete construction.	Developer in partnership with Lichfield District Council or Parish Council.
New community 'hub' to be provided within the Central Neighbourhood Area to include classes A1 to A5 of the General Permitted Development (Amendment) order 2005. The hub must also incorporate, or be adjacent to, facilities which	Cost will vary	Developer	Alongside construction to begin on commencement	Developer

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
can be used for playing pitches, sport and recreation.				
Playing pitches and changing / pavilion space to be provided at a minimum level of 1.23ha per 1000 population in line with Development Management policy HSC2. For this site this is 2.13ha min.	Indicative cost for a playing pitch between £60,000 and £100,000 depending on local circumstances. Changing block costs £250,000 (2 team) or £350,000 (4 team).	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council, Parish Council and local sports clubs and organisations as applicable.
Equipped play area to be provided in a safe and accessible location, to ensure that all parts of the development are within 480m / 10 minutes walk time of an equipped play facility in line with Development Management Policy HSC1.	Will vary	CIL or S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Parish Council.
Amenity Green Space to be provided at a minimum rate of 1.43ha per 1000 population and to ensure all residents are within 480m / 10 minutes walk time of an amenity green space in line with Development Management Policy HSC1. For this site this is 2.46ha min.	Will vary	Developers / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Parish Council.
New allotment space to be provided at a minimum rate of 1 plot (150sq.m.) per 32 households in line with Development Management Policy HSC1. For this site this is 23 plots min.	Will vary	Developers / CIL or S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for management	Developer in partnership with Lichfield District Council and Parish Council and Allotments Society.

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
Contributions to secondary / post 16 education, and improved leisure facilities for Lichfield City as detailed under 'strategic infrastructure'.	See strategic infrastructure	CIL (see strategic infrastructure)	See strategic infrastructure.	See strategic infrastructure.
Public art to be a feature of the development.	Will vary	S106	By full construction stage	Developer in partnership with Lichfield District Council and Parish Council and local arts organisations.
Green Infrastructure				
All new landscaping must assist in assimilating this development into the wider landscape and topography.	Will vary	Developer	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer
A network of green spaces will be integrated into the development to reflect the standards set out in Development Management Policies HSC1 and HSC2 (see also 'social and community' infrastructure). These need to be carefully designed to take into account natural surveillance and the amenity of neighbouring residents.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
Areas of biological interest or grassland habitat will be protected and, where possible integrated as part of the open spaces network.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
Existing natural features, including quality hedgerows and significant trees will be incorporated within the layout. New landscaping and planting will be sited and selected to include sufficient tree canopy cover across the	Will vary	Developer / S106	Alongside development of the site, to be completed	Lichfield District Council with developer and in partnership with others as applicable.

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
site to deliver landscape - related climate-change adaptation, urban cooling, shade and shelter and visually enhance the development. Parks, open spaces, streets and public areas must incorporate sufficient space above and below ground to enable large canopy trees to develop to maturity.			by full construction stage with an ongoing programme for maintenance.	
The development will include the retention and enhancement of exiting quality hedgerows and significant trees and habitat within the site and to its edges. The existing settlement is clearly defined by mature hedgerows along Burton Road and this characteristic will be incorporated into any proposal.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicabl

Burntwood

5.14 Burntwood Town Council have adopted Burntwood Town Strategy (2011) which sets out a number of priorities for the area. The document remains 'live' is being updated with work ongoing by the Town Council (the list below reflects amended priorities as of July 2016) in addition the infrastructure requirements are also incorporated into the Town Council's service delivery deliberations. A number of the priorities identified are also seen as Strategic Infrastructure requirements within the IDP and therefore details on the response to those needs have been referenced elsewhere. In addition it should be noted that the intervention response to a number of the priorities will be through revenue based activity, such responses have not been not captured within the IDP.

- Delivery of a town centre (see also Strategic Infrastructure) and associated environmental improvements (e.g. to Sankey's Corner);
 - Supporting the delivery of two health centres in Burntwood (see Strategic Infrastructure; this issue is already being addressed) and encouraging the provision of high quality care facilities for older people.
 - Delivery of a range of housing, especially of brownfield land, and especially for families and young people (see Strategic Infrastructure);
 - Improvements to public transport access (see also Strategic Infrastructure) including improved bus networks and reopening of the Walsall-Lichfield rail link and delivery of a station at Burntwood;
 - Improved pathways and trails, including link to Chasewater Country Park (see Strategic Infrastructure);
 - Improvements that will identify Burntwood more strongly and coherently as a place;
 - Support for businesses;
 - Measures to reduce/prevent crime and antisocial behaviour;

- Local environmental improvements;
- Support for children’s and young people’s activities including play areas and access to these- see (also the Open Space Assessment)
- Social activities for the wider community, including maximising opportunities for the development of social facilitated and making best/ more effective use of existing ones:
- Improvement and delivery of learning and training opportunities in the area:
- Developing volunteering/ community participation;
- Developing partnerships including those addressing environmental sustainability and biodiversity support;

5.15 Open Space Assessment

5.16 The open space assessment 2016 priorities for Burntwood the following for action:

- Addressing low scoring sites by focusing on individual elements e.g bins and benches at sites that are low scoring.
- Exploring opportunities for additional sites within the settlement particularly to the south of Cannock Road.

East of Burntwood Bypass Strategic Development Allocation

5.17 375 homes will be delivered to the East of Burntwood Bypass. Development has commenced on site.

5.18 East of Burntwood Bypass SDA site specific infrastructure needs.

Table 5.5

Infrastructure Requirement East of Burntwood SDA	Cost	Funding	Phasing	Delivery Lead
Physical infrastructure				
Vehicular access to the site will be from Milestone Way. Design of the internal road network to accord with the Manual for Streets.	Will vary	Developer (access from Milestone Way already constructed).	At outset	Developer with Staffordshire County Council.
Cycle and pedestrian movement to be direct, safe, convenient, attractive and overlooked and will be supported by an internal network of green corridors to link to those beyond the development and allow for access to the countryside, Burntwood Town Centre and to Chasewater. Integration of safer cycle and pedestrian routes to existing schools where this is possible, to encourage walking and cycling for young people will be a priority.	Will vary	Developer / S106	Prior to first occupation	Developer with Staffordshire County Council.

Infrastructure Requirement East of Burntwood SDA	Cost	Funding	Phasing	Delivery Lead
Inclusion of safe crossing points outside the site, including links to Chasewater.				
Increased frequency and enhanced provision of bus services to provide a convenient and well designed service connecting all new neighbourhoods and providing links into Burntwood Town Centre. All proposed development should be within 350m of a bus stop.	Will vary	Developer with Staffordshire County Council and service providers.	Alongside first occupation	Developer with Staffordshire County Council.
Smarter Travel Choices will be promoted to ensure residents and employees are aware of the options available to them to reduce car usage.	Will vary	See Strategic Infrastructure (transport)	Alongside first occupation	Developer with Staffordshire County Council.
Measures to address water supply and waste water treatment capacity issues (see strategic infrastructure).	Will vary - see Strategic Infrastructure	See Strategic Infrastructure	See Strategic Infrastructure Trigger of first 130 dwelling as been set through condition..	See Strategic Infrastructure .
Relocation / provision of existing utilities infrastructure.	Will vary	Developer and utilities companies.	To be agreed between developer and utilities companies.	Developer with utilities companies.
Provision of any necessary flood mitigation measures, the provision of sustainable drainage and a sustainable management strategy for the maintenance of these.	Costs will vary	Conditions	Alongside construction to start on construction.	Developer with Environment Agency/ LLFA.
High speed broadband shall be incorporated within new developments.	Will vary	Developer	Alongside construction	Developer
Social and Community Infrastructure				
A mix of house types, sizes and tenures and an appropriate level of affordable housing in accordance with Development Management policies H1 and H2 of the Local Plan. The affordable housing shall include a mix of	Costs will vary	Developer S106, Registered providers, housing associations.	Throughout construction	Developer in partnership with other organisations as applicable.
tenure to meet housing needs and will be pepper-potted within the development and shall be indistinguishable from open market housing. Playing pitches and changing / pavilion space to be provided at a minimum level of 1.23ha per 1000 population in line with Development Management policy HSC2. For this site this is 1.06ha min.	Off site trigger agreed	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Partnership between Lichfield District Council and Burntwood Town Council and local sports clubs and organisations as applicable.
Equipped play area to be provided in a safe and accessible location, to ensure that all parts of the development are within 480m / 10 minutes walk time of an equipped play facility in line with Development Management Policy HSC1.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Burntwood Town Council.
Amenity Green Space to be provided at a minimum rate of 1.43ha per 1000 population and to ensure all residents are within 480m	Will vary	S106	Alongside development of the site, to be completed by full	Developer in partnership with Lichfield District

Infrastructure Requirement East of Burntwood SDA	Cost	Funding	Phasing	Delivery Lead
/ 10 minutes walk time of an amenity green space in line with Development Management Policy HSC1. For this site this is 1.23ha min.			construction stage with an ongoing programme for maintenance.	Council and Burntwood Town Council.
New allotment space to be provided at a minimum rate of 1 plot (150sq.m.) per 32 households in line with Development Management Policy HSC1. For this site this is 11 allotments.	Will vary	Developers S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Burntwood Town Council and allotments organisations.
Contributions to education as detailed under 'Strategic Infrastructure'.	See Strategic Infrastructure	S106	See Strategic Infrastructure.	See Strategic Infrastructure.
Public art to be a feature of the development.	Will vary	Developer S106	By full construction	Developer in partnership with Lichfield District Council, Burntwood Town Council and local arts organisations.
Green Infrastructure				
There will be appropriate mitigation for ecological and future management issues, including the delivery of suitable alternative habitat of greater quantity than that lost through development.	Will vary	Developer / S106	Prior to development taking place.	Developer with Lichfield District Council.
All new landscaping must assist in assimilating this development into the wider landscape and topography, including the pond to the south of the site.	Will vary	Developer	Alongside development	Developer
A network of green spaces will be integrated into the development to reflect the standards set out in Development Management Policies HSC1 and HSC2 (see also 'Social and Community' Infrastructure). Links to Chasewater Country Park are especially important. These links and green spaces need to be carefully designed to take into account natural surveillance and the amenity of neighbouring residents.	Will vary	Developer / S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
Existing natural features, including quality hedgerows and significant trees will be incorporated within the layout. New landscaping and planting will be sited and selected to include sufficient tree canopy cover across the site to deliver landscape - related climate-change adaptation, urban cooling, shade and shelter and visually enhance the development. Parks, open spaces, streets and public areas must incorporate sufficient space above and below	Will vary	Condition	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Infrastructure Requirement East of Burntwood SDA	Cost	Funding	Phasing	Delivery Lead
ground to enable large canopy trees to develop to maturity.				
The development will include the retention and enhancement of exiting quality hedgerows and significant trees and habitat within the site and to its edges.	Will vary	Condition	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Rural Areas

5.19 The infrastructure needs of the District's rural communities are very varied. The following section is set out in order to reflect the apportionment of development to each community as set out in the Local Plan. Firstly, therefore it covers Fradley, then the Key Rural Settlements of Alrewas, Armitage with Handsacre, Fazeley / Mile Oak and Bonehill, Shenstone and Whittington. Finally, this section covers 'other rural' i.e. the District's smaller rural communities.

Fradley Strategic Development Allocation

5.20 1,250 homes will be delivered in Fradley. The SDA comprises of a number of separate planning applications not all of which have been determined. Due to the staggered timings of approvals there is a patchwork of planning obligations (per/post CIL) associated with infrastructure delivery for this site.

Table 5.6 Fradley SDA infrastructure needs

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
Physical infrastructure				
The development will ensure the segregation of traffic associated with with the adjacent industrial park from the SDA	Will vary	Developer	Alongside development	Developer with Staffordshire County Council.
Junction access on to the A38 and local highway improvements will be addressed where necessary, and also local connections to the surrounding villages and Lichfield. Measures will need to be modelled to ensure that they are an effective solution and should be capable of delivery at an appropriate time in the delivery of the development.	Will vary	S278	Alongside development	Developer with Staffordshire County Council and Highways Agency.
Safe crossing points will be provided to allow for the safe movement of people on foot and cycle from within the existing communities of Fradley and Fradley South to the SDA and its amenities, especially the primary school, social and community facilities and green spaces. Safer pedestrian routes will be integrated,	Options to be considered.	S106	Alongside development	Developer with Staffordshire County Council

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
especially to the school to encourage walking for all.				
The design of the internal road network shall accord fully to the principles of Manual for Streets.	Will vary	Developer	Alongside development	Developer with Staffordshire County Council
A convenient and well designed bus service will be provided, fully accessible from all parts of the SDA which should include an improved regularity of service. This must take account of the existing service in Fradley and Fradley South and make improvements where necessary. It must provide a convenient connection to Lichfield and Lichfield Trent Valley Station. All proposed development should aim to be within 350m of a bus stop. Two new 20 minute frequency bus services are required to link the new South of Lichfield allocation(s) to the city centre to ensure linkages to existing bus station, train stations local shops and education provision.	Will vary	Developer with Staffordshire County Council and service providers.	Alongside development	Developer with Staffordshire County Council and service providers.
The existing bridges over the canal will be integrated into the design of new development to assist the safer movement of pedestrians and cyclists into the countryside, surrounding villages and Fradley Junction.	Will vary	Developer	Alongside development	Developer
Smarter Travel Choices will be promoted to ensure residents and employees are aware of the options available to them to reduce car usage.	Will vary	See strategic infrastructure (transport)	Alongside first occupation	Developer with Staffordshire County Council.
Provision will be made for sufficient mitigation of the effects of the adjacent industrial and agricultural uses. Where this requires physical alterations to the land e.g. bunding, this shall be fully integrated in the design of the landscaping and disposition of uses in the layout.	Will vary	Developer	Alongside development	Developer
Measures to address water supply and waste water treatment (see Strategic Infrastructure).	Will vary	See Strategic Infrastructure	See Strategic Infrastructure	Developer with water companies.
Relocation / provision of existing utilities infrastructure.	Developer with utilities companies.	Developer with utilities companies.	To be agreed between developer and utilities companies.	Developer with utilities companies.
Provision of any necessary flood mitigation measures, the provision of sustainable drainage and a sustainable management strategy for the maintenance of these.	Will vary	Combination of S106 and CIL depending on approval date.	Alongside construction to begin on commencement.	Developer with Environment Agency.

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
High speed broadband shall be incorporated within new developments.	Will vary	Developer	Alongside construction	Developer
Social and Community infrastructure				
A mix of house types, sizes and tenures and an appropriate level of affordable housing in accordance with Development Management policies H1 and H2 of the Local Plan. The affordable housing shall include a mix of tenure to meet housing needs and will be pepper-potted within the development and shall be indistinguishable from open market housing.	Will vary	Will vary - developers, public funding, S106, grant funding, Registered providers, housing associations, charitable bodies etc	Throughout construction	Developer in partnership with other organisations as applicable.
The development should create neighbourhood facilities to extend the range of services available at the existing neighbourhood centre. An extended community hub should be provided within the neighbourhood area and should explore uses potentially including primary health care facilities and a community library / rerouted mobile library facilities. There is scope to link the community facilities to the school. Options for this will need to be considered in detail such as extending an existing facility or linking provision to expanded school facilities.	Will vary	S106	Alongside development of the site to be completed by full construction stage.	Developer with Lichfield District Council, Parish Council and local organisations as applicable.
There is a potential need to provide health care facilities to serve Fradley. Whilst these have not been specified for the short term there should be a longer term aim to deliver services directly to the community either in a bespoke unit or as outreach provision.	Will vary depending of intervention see Strategic Infrastructure Section	Secured S106, NHS, CIL	By full construction stage however shape of intervention may change over the plan period.	Health care providers with Lichfield District Council and developers.
Adequate primary school provision shall be made to serve the village, which will need to provide a minimum of 3.5 Form Entry (FE) overall, including Early Years provision. This will include a 1/2FE extension to the existing primary school, plus a new primary school within the SDA.	Will vary depending upon agreed approach. Indicative costings: an extension to the existing school to provide an additional 0.5 FE would be £2.8m approx. A new 1 FE school costs around £4.256m, a 1.5 FE school	S106	Phasing / trigger points to be agreed with Staffordshire County Council	Developers with Staffordshire County Council

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
	costs around £5.5m.			
Playing pitches and changing / pavilion space to be provided at a minimum level of 1.23ha per 1000 population in line with Development Management policy HSC2. Provision will be made for a new community football facility with 2-3 pitches. Consideration will be given to the provision of a new cricket pitch, either at Alrewas or in Fradley as a satellite club of Alrewas. Minimum provision 2.83ha.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Partnership between Lichfield District Council, Parish Council and local sports clubs and organisations as applicable.
Equipped play area to be provided in a safe and accessible location, to ensure that all parts of the development are within 480m / 10 minutes walk time of an equipped play facility in line with Development Management Policy HSC1.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Parish Council.
Amenity Green Space to be provided at a minimum rate of 1.43ha per 1000 population and to ensure all residents are within 480m / 10 minutes walk time of an amenity green space in line with Development Management Policy HSC1. For this site this is 3.29ha min.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Parish Council.
New allotment space to be provided at a minimum rate of 1 plot (150sq.m.) per 32 households in line with Development Management Policy HSC1. For this site this is 31 plots min.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council, Parish Council and Allotments organisations.
Contributions to secondary / post 16 education, and improved leisure facilities for Lichfield City as detailed under 'Strategic Infrastructure'.	See Strategic Infrastructure	Combination of S106 and CIL depending on approval date.	Investment will take place through plan period	Staffordshire County Council
Public art to be a feature of the development.	Will vary	S106	By full construction stage	Developer in partnership with Lichfield District Council, Parish Council and local arts organisations.
Green Infrastructure				
The development should be responsive to the qualities of the land and existing landscaping, and new landscaping should help assimilate this SDA into the wider landscape. This includes the canal. The existing balancing ponds and water features should also be fully integrated, potentially becoming a central park to serve the whole of Fradley.	Will vary	Developer	Alongside development to ensure that existing residents of adjacent development are not deprived of open space and that new residents are provided with	Developer working with Lichfield District Council.

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
			adequate facilities from the outset of site occupation. A clear phasing strategy will be required to achieve this.	
A network of green spaces will be integrated into the development to reflect the standards set out in Development Management Policies HSC1 and HSC2 (see also 'social and community' infrastructure). These need to be carefully designed to take into account natural surveillance and the amenity of neighbouring residents.	Will vary	Combination of S106 and CIL depending on approval date.	Alongside development, to be completed by full construction stage with an ongoing programme for maintenance.	Developer with Lichfield District Council, Parish Council and in partnership with others as applicable.
The development will consider and propose measures to mitigate, manage and protect, where appropriate, any local areas of biological interest. Where possible and appropriate this will be integrated as part of the open spaces network, or alternatively mitigated for off-site.	Will vary	Combination of S106 and CIL depending on approval date.	Prior to development taking place	Developer with Lichfield District Council.
Existing natural features, including quality hedgerows and significant trees and habitats will be incorporated within the layout. New landscaping and planting will be sited and selected to include sufficient tree canopy cover across the site to deliver landscape - related climate-change adaptation, urban cooling, shade and shelter and visually enhance the development. Parks, open spaces, streets and public areas must incorporate sufficient space above and below ground to enable large canopy trees to develop to maturity.	Will vary	Combination of S106 and CIL depending on approval date.	Alongside development, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
The development will include the retention and enhancement of existing quality hedgerows and significant trees and habitat within the site and to its edges.	Will vary	Combination of S106 and CIL depending on approval date.	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

5.21 Open Space Assessment

5.22 The open space assessment 2016 priorities for Fradley the following for action:

- Opportunities for additional amenity greenspace should be explored where possible or in response to an identified need.
- Improvement to elements of the greenspaces should be considered if opportunities arise.

Key rural settlements

5.23 The key rural settlements have defined some of their key local infrastructure needs through the Rural Masterplanning Project 2011 (also known as the rural villages project), which also pulled together other evidence from the Local Plan evidence base. These needs - which include specific local issues from other parts of the evidence base (such as the Playing Pitch Strategy 2012) are as follows. Please note - no timescales have been addressed here, as specific sites will be allocated through the Local Plan Allocations document. The IDP will be updated accordingly as work on this progresses, and this will also take account of work being undertaken to prepare more localised plans such as Neighbourhood or Parish Plans for example.

5.24 Alrewas local infrastructure needs

- Improved traffic management along Main Street and Fox Lane;
- Improving public access to the countryside;
- Improving links to the National Memorial Arboretum including a footbridge over the A38 (an indicative cost of £13m for this has been provided by Staffordshire County Council);
- Initiatives to reduce the noise and visual impact of the A38 on the village;
- Delivery of a rail station to serve Alrewas and other public transport improvements;
- Well designed housing to serve local need as set out in Policy Alr4;
- Improving social and recreational facilities including the village hall, doctors surgery, play and open space provision (especially in the north), pedestrian and cycle routes;
- Delivering additional facilities for football and cricket to serve Alrewas and Fradley (see also Fradley SDA);
- Extension to Primary School provision, 77 place expansion of All Saints Alrewas Primary School to increase the school from 238 places to 315 places funding will be secured through CIL.
- Improvements to the canal including the towpath and additional moorings to encourage more tourism.

5.25 Open Space Assessment

5.26 The open space assessment 2016 priorities for Alrewas the following for action:

- Opportunities for additional spaces should be explored where possible or in response to an identified need such within the northwest of Alrewas.
- Consideration of safe crossing points across Main Street to enable safer links between north and south.

5.27 Armitage with Handsacre local infrastructure needs

- Improvements which address issues of traffic management and safety particularly for pedestrians and cyclists;
- Improvements which address issues of localised surface water flooding;
- Improvements to the canal conservation area, including links to the village to encourage tourism and support local businesses;

- Creation of a more distinct village 'centre' / focal point;
- Well designed housing to address local need as set out in Policy Arm4;
- A range of projects which contribute to improved health including play provision, green infrastructure, sustainable transport.
- The provision of new amenity green space, especially to the west of the settlement and to the east around Tuppenhurst Lane;
- The provision of a new football pitch in an appropriate location, potentially either through the reinstatement of the former pitch at Millmoor Avenue or the formalisation of facilities at Shropshire Brook Road.

5.28 Open Space Assessment

5.29 The open space assessment 2016 priorities for Alrewas the following for action:

- Opportunities for additional amenity greenspace should be explored where possible or in response to an identified need such within the west of Armitage with Handsacre.
- Consideration of a safe crossing points across Main Street to enable safer links from the north.

5.30 Fazeley, Mile Oak and Bonehill local infrastructure needs

- Environmental improvements, including enhancement to the physical environment, bringing derelict buildings back into re-use, improvements to traffic and pedestrian safety, improvements to green infrastructure;
- Provision of additional amenity green space, and equipped play particularly around Bonehill / Deer Park;
- Initiatives and projects aimed at: lessening the level of antisocial behaviour; improving the health of the local community; providing a range of facilities for older children, teenagers and older people; improving pedestrian and cycle linkages between communities;
- The provision of up to four football pitches to serve the Fazeley ward (possibly at Rawlett school) to address local shortfall;
- Improvements to canals, towpaths and links from these into the local community;
- Possible investment in health facilities.
- Well designed housing to address local need as set out in Policy Faz4.

5.31 Some of this work is underway. Whilst Fazeley is actually one of the Key Rural Settlements, its historic industrial townscape gives the eastern end of this linear settlement a distinct urban feel. There is a need to protect and enhance this area, much of which is a Conservation Area.

5.32 Open Space Assessment

5.33 The open space assessment 2016 priorities for Fazeley , Bonehill & Mile Oak the following for action:

- Improve provision of greenspace accessible to Bonehill and Reindeer Road residents

- Improvement to elements of the greenspaces should be considered if opportunities arise.
- Provision of safe routes to existing spaces particularly those in the east of the settlement,

5.34 Shenstone local infrastructure needs

- Measures to manage traffic more effectively and safely, including traffic calming and additional parking for the station, and improved cycling and walking routes;
- Improvements to the range and quality of local facilities and amenities including allotments;
- The provision of an additional playing pitch if unmet demand can be clearly shown in the longer term;
- Improvements to rail services and facilities including parking;
- Well designed housing to address local need as set out in Policy Shen4.

5.35 Open Space Assessment

5.36 The open space assessment 2016 priorities for Shenstone the following for action:

- The provision of additional spaces should be explored where possible to accommodate a variety of informal uses particularly within the south of the settlement.
- Any future development should contribute towards amenity greenspace.

5.37 Whittington local infrastructure needs

- Initiatives to improve and enhance the local environment, including the area around the shops, measures for improving traffic safety, and measures to address localised surface water flooding issues;
- The provision of three additional football pitches to serve the ward (not necessarily within the village itself) in line with the Playing Pitch Strategy;
- The provision of additional cricket facilities to serve the ward (again, not necessarily within the village) provided that unmet demand can be clearly demonstrated, in accord with the Playing Pitch Strategy;
- Well designed housing to address local need as set out in Policy Whit4.

5.38 Open Space Assessment

5.39 The open space assessment 2016 priorities for Whittington the following for action:

- Opportunities for additional greenspaces accessible to the northern part of the settlement.
- Opportunities for improvement of existing sites through benches and bins where appropriate.

Other rural areas

5.40 Infrastructure needs across other rural communities will vary according to local circumstances. These are too extensive to list in detail in this document, but regard will be had to issues which are identified through locally produced plans such as Neighbourhood or Parish Plans which set out evidence of local requirements.

East of Rugeley Strategic Development Allocation

5.41 Around 1,130 homes will be delivered to the East of Rugeley. A significant number of dwellings and supporting infrastructure requirements have been delivered as part of this SDA. There are a number of proposals (Rugeley Power Station and protection of the valued Borrowpit area from residential development) within the Local Plan Allocations Document that may have an impact on the need, location and scope of remaining requirements. Until details relating to allocations have been confirmed infrastructure requirements within table 5.6 will remain unamended and should be considered long within those requirements listed under the IDP section Rugeley Power Station.

Table 5.7 East of Rugeley SDA site specific infrastructure needs

Infrastructure Requirement East of Rugeley	Cost	Funding	Phasing	Delivery Lead
Physical infrastructure				
Vehicular access into the site will be from Armitage Road (A513). Design of the internal road network to accord with the Manual for Streets.	Developer	Developer	Alongside development	Developer with Staffordshire County Council.
Increased frequency and enhanced provision of bus services to provide a convenient and well designed service connecting all new neighbourhoods and providing links into Rugeley, Armitage with Handsacre and Lichfield. All proposed development should be within 350m of a bus stop.	Will vary.	Developer with Staffordshire County Council and service providers.	Alongside increasing occupation of the site.	Developer with Staffordshire County Council and service providers.
Cycle and pedestrian movement to be direct, safe, convenient, attractive and overlooked and will be supported by an internal network of green corridors to link to those beyond the development, including the canal, and allow for access to the countryside, Armitage with Handsacre, and Rugeley Town Centre. Integration of safer cycle and pedestrian routes to existing schools where this is possible, to encourage walking and cycling for young people will be a priority. Inclusion of safe crossing points outside the site.	Will vary.	Developer / S106.	Alongside occupation.	Developer with Staffordshire County Council.
Smarter Travel Choices will be promoted to ensure residents and employees are aware of the options available to them to reduce car usage.	Will vary	See Strategic Infrastructure (transport)	Alongside occupation	Developer with Staffordshire County Council.

Infrastructure Requirement East of Rugeley	Cost	Funding	Phasing	Delivery Lead
Measures to address water supply and waste water treatment (see strategic infrastructure).	Will vary - see Strategic Infrastructure	See Strategic Infrastructure	See Strategic Infrastructure .	Developer with South Staffs Water and Severn Trent Water.
Relocation / provision of existing utilities infrastructure.	Developer with utilities companies.	Developer with utilities companies.	To be agreed between developer and utilities companies.	Developer with utilities companies.
Provision of any necessary flood mitigation measures, the provision of sustainable drainage and a sustainable management strategy for the maintenance of these.	Will vary	Developer	Alongside construction	Developer
High speed broadband shall be incorporated within new developments.	Will vary	Developer	Alongside construction	Developer
Social and Community Infrastructure				
A mix of house types, sizes and tenures and an appropriate level of affordable housing in accordance with Development Management policies H1 and H2 of the Local Plan. The affordable housing shall include a mix of tenure to meet housing needs and will be pepper-potted within the development and shall be indistinguishable from open market housing.	Will vary	Will vary - developers, public funding, S106, grant funding, Registered providers, housing associations, charitable bodies etc	Throughout construction	Developer in partnership with other organisations as applicable.
Contributions to education are to be determined as a result of cross boundary discussions with Cannock Chase Council & Staffordshire County Council. O.5 Form Entry (FE) primary provision needed in relation to this SDA, Rugeley also needs to provide 0.5FE (within boundaries of Cannock Chase DC area). A 105 place expansion of Hob Hill Primary School, Rugeley to increase the school from 210 to 315 places following housing growth in Armitage with Handscare funding will be secured through CIL.	£2m	CIL	0.5FE required post 2019 in relation to this SDA	See also Strategic Infrastructure .
New community 'hub' to be provided within the Central Neighbourhood Area to include classes A1 to A5 of the General Permitted Development (Amendment) order 2005.	Will vary	Developer	By completion	Developer
Community centre to be delivered as part of the community 'hub' .	£800,000 based on cost of	S106	By completion.	Developer working in partnership with Lichfield District

Infrastructure Requirement East of Rugeley	Cost	Funding	Phasing	Delivery Lead
	Darwin Park community centre.			Council and Parish Council.
Playing pitches and changing / pavilion space to be provided at a minimum level of 1.23ha per 1000 population in line with Development Management policy HSC2. For this site this is 3.26ha min.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Partnership between Lichfield District Council and Parish Council and local sports clubs and organisations as applicable.
Equipped play area to be provided in a safe and accessible location, to ensure that all parts of the development are within 480m / 10 minutes walk time of an equipped play facility in line with Development Management Policy HSC1.	Will vary	S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Parish Council.
Amenity Green Space to be provided at a minimum rate of 1.43ha per 1000 population and to ensure all residents are within 480m / 10 minutes walk time of an amenity green space in line with Development Management Policy HSC1. For this site this is 3.84ha min.	Will vary	Developers S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Parish Council.
New allotment space to be provided at a minimum rate of 1 plot (150sq.m.) per 32 households in line with Development Management Policy HSC1. For this site this is 35 plots min.	Will vary	Developers CIL or S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council, Parish Council and Allotments organisations.
Public art to be a feature of the development.	Will vary	Developers S106	By full construction stage	Developer in partnership with Lichfield District Council, Parish Council and local arts organisations.
Green Infrastructure				
All new landscaping must assist in assimilating this development into the wider landscape and topography.	Will vary	Developer	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Developer
A network of green spaces will be integrated into the development to reflect the standards set out in Development Management Policies HSC1 and HSC2 (see also 'social and community' infrastructure). These need to be carefully designed to take into account	Will vary	Developer S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Infrastructure Requirement East of Rugeley	Cost	Funding	Phasing	Delivery Lead
natural surveillance and the amenity of neighbouring residents.				
Areas of biological interest or heathland / grassland habitat will be protected and, where possible integrated as part of the open spaces network.	Will vary	Developer S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
Existing natural features, including quality hedgerows and significant trees will be incorporated within the layout. New landscaping and planting will be sited and selected to include sufficient tree canopy cover across the site to deliver landscape - related climate-change adaptation, urban cooling, shade and shelter and visually enhance the development. Parks, open spaces, streets and public areas must incorporate sufficient space above and below ground to enable large canopy trees to develop to maturity.	Will vary	Developer S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.
The development will include the retention and enhancement of exiting quality hedgerows and significant trees and habitat within the site and to its edges.	Will vary	Developer S106	Alongside development of the site, to be completed by full construction stage with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Rugeley Power Station

5.42 Policy R1: East of Rugeley Housing Land Allocation, allocated the Former Rugeley power station as a site for a sustainable well designed mixed use development to provide approximately a minimum of 800 dwellings, appropriate associated facilities and transport, social and physical infrastructure. The site is part of a much wider large scale site which straddles both Lichfield District and Cannock Chase District local planning authority boundaries.

5.43 In summary the following infrastructure requirements have been identified to enable the development.

- A range of housing in accordance with Development Management Policies H1 and H2 and having regard to needs arising with Rugeley.
- Neighbourhood facilities including a community hub to incorporate a community /sports buildings and small scale convenience retail provision.
- Provision of a new primary school to be accommodated within the scheme at an accessible location.

- Provision for open space, sport and recreation facilities in line with Development managements Policies HSC1 And HSC2 and incorporating playing pitches, amenity green space, equipped play, allotments, and the retention/protection of any existing sports and recreation facilities that are not justified to be surplus to requirements.
- Landscaping and Green Infrastructure provision to include the creation of areas of appropriate and sustainable habitats sufficient to achieve a measurable net-gain to biodiversity in line with the requirements of Policy NR3 and the Biodiversity and Development SDP. This must include the retention of quality hedgerows and significant trees, and their incorporation onto the landscape, and the allowance for significant tree canopy cover in line with Development Management Policies NR4 and NR6 and the Trees Landscaping and Development SPD 2016.
- A clear strategy for delivering links to Rugeley Town Centre, and Armitage with Handscare, showing how these will be incorporated into an integrated open space and green infrastructure network, including links to the canal and existing green spaces.
- Protection of local areas and habitats of biological interest.
- The provision of public transport to serve the site: all development should be within 350m of a bus stop and should promote smarter travel choices.
- The provision of pedestrian and cycling routes throughout the site, linking to the green infrastructure network and existing settlements, services and facilities beyond the site boundaries including safe crossing points.
- Provision of a minimum of two main points of vehicular access should ideally be sought.
- The provision and maintenance of sustainable drainage systems and flood mitigation measures integrating the retention of existing water courses where possible and having regard to the existing Flood Zone to the north of the railway line.
- Measures to address water supply and waste water treatment, relocation and provision of utilities infrastructure.
- The incorporation of public art.

North of Tamworth Broad Development Location

5.44 1,000 homes will be delivered by 2029 within a Broad Location to the north of Tamworth. This will be reliant upon a range of infrastructure delivered within Tamworth, especially the linkages proposed within Tamworth Borough Council's spatial strategy.

5.45 Details will be developed further through the Local Plan Allocations document and the IDP will be updated accordingly.

5.46 In summary the requirements are:

5 Local Infrastructure Needs

- A range of housing in accordance with Development Management Policies H1 and H2 and having regard to needs arising within Tamworth Borough;
- Provision for open space, sport and recreation facilities in line with Development Management policies HSC1 and HSC2 and incorporating playing pitches, amenity green space, equipped play and allotments;
- Landscaping and Green Infrastructure provision including the retention of quality hedgerows and significant trees, and their incorporation into the landscape, and the allowance of significant tree canopy cover in line with Core Policies NR3 and NR5;
- A clear strategy for delivering links to Tamworth, and showing how these will be incorporated into an integrated open space and green infrastructure network;
- Protection of local areas and habitats of biological interest;
- The provision of well-planned public transport to serve the site; all development to be within 350m of a bus stop;
- The provision of pedestrian and cycling routes throughout the site, linking to the green infrastructure network and to the settlements, services and facilities beyond the site boundaries including safe crossing points;
- Vehicular access that is integrated with the Anker Valley proposed within Tamworth Borough;
- The provision and maintenance of sustainable drainage systems and flood mitigation measures.
- A new 1.5FE Primary
- Expansion to the Rawlett School an AET Academy for secondary provision.

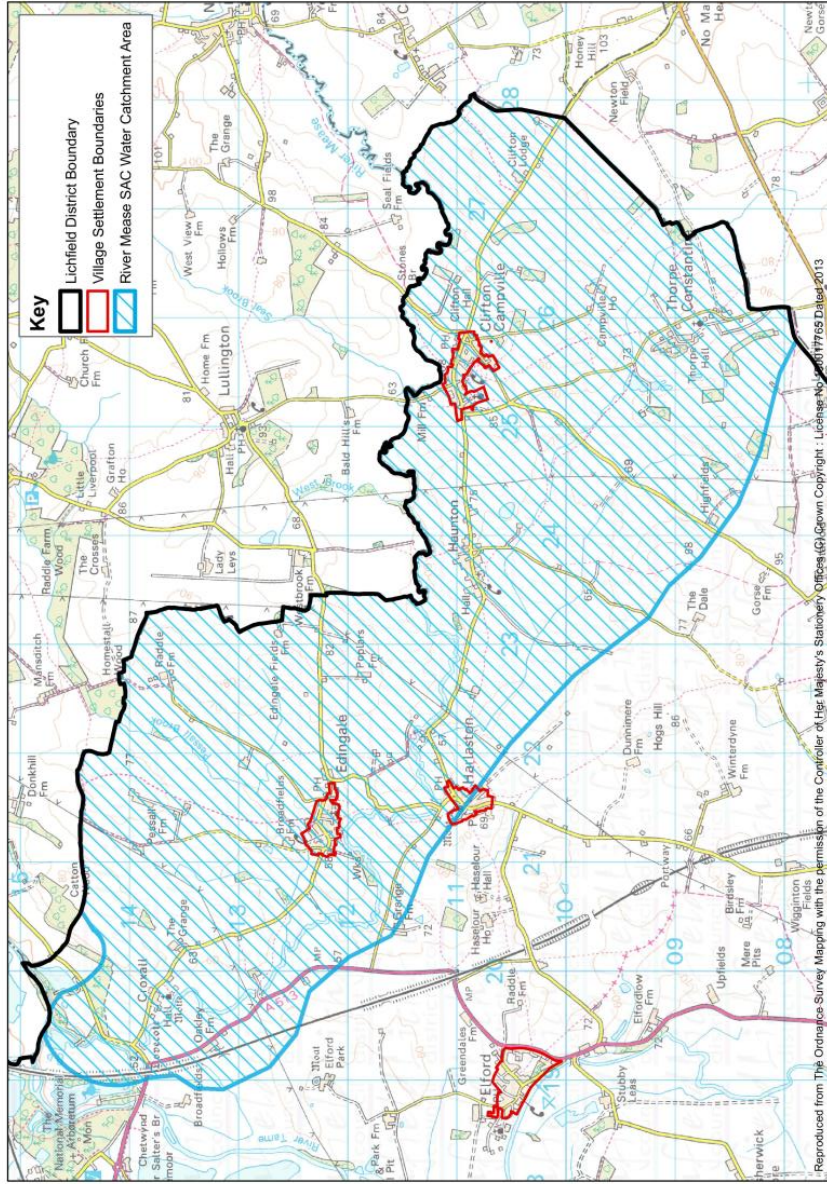
Appendix A Lichfield District Integrated Transport Strategy

Appendix A Lichfield District Integrated
Transport Strategy

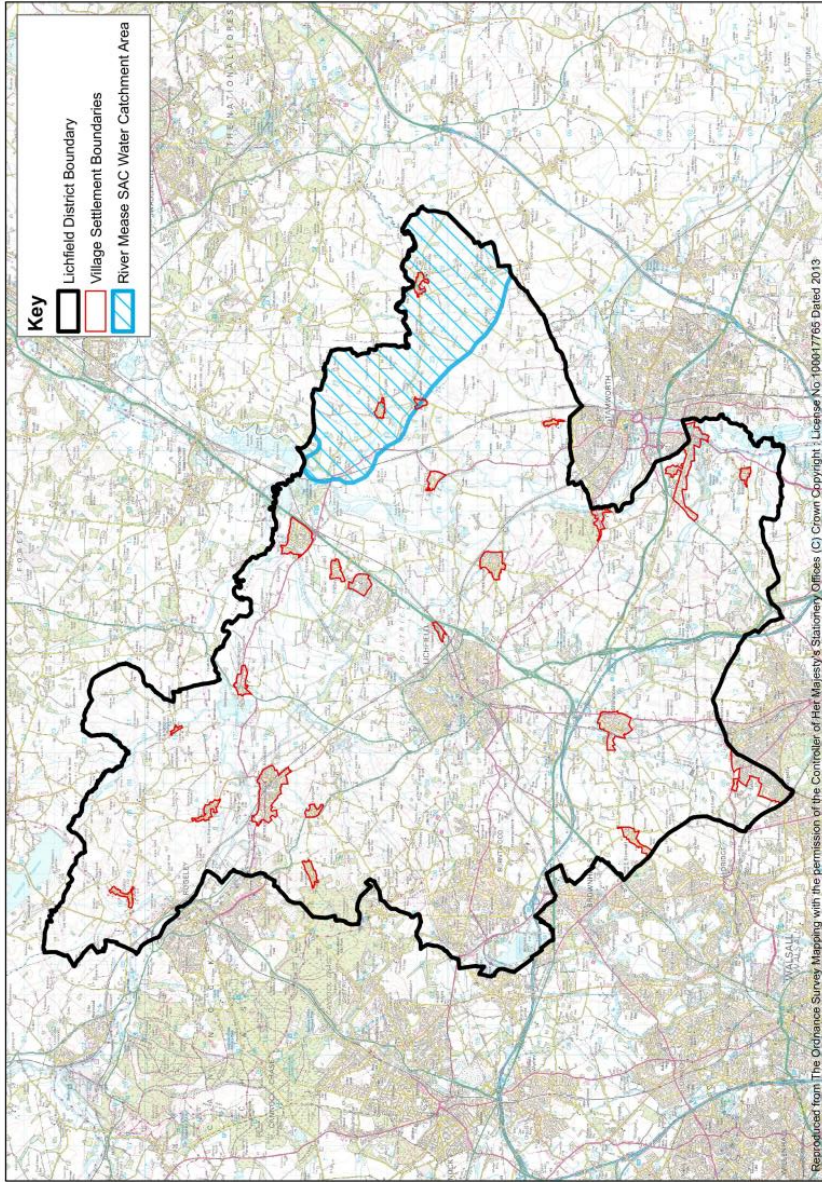
Appendix B River Mease SAC Water Catchment Area

Appendix B River Mease SAC Water Catchment Area

Map B.1 River Mease SAC Water Catchment Area



Map B.2 River Mease SAC Water Catchment Area - District Wide



Appendix B River Mease SAC Water Catchment Area

Appendix C Cannock Chase SAC Zone of Influence

Appendix C Cannock Chase SAC Zone of Influence

Map C.1 Cannock Chase SAC Zone of Influence

