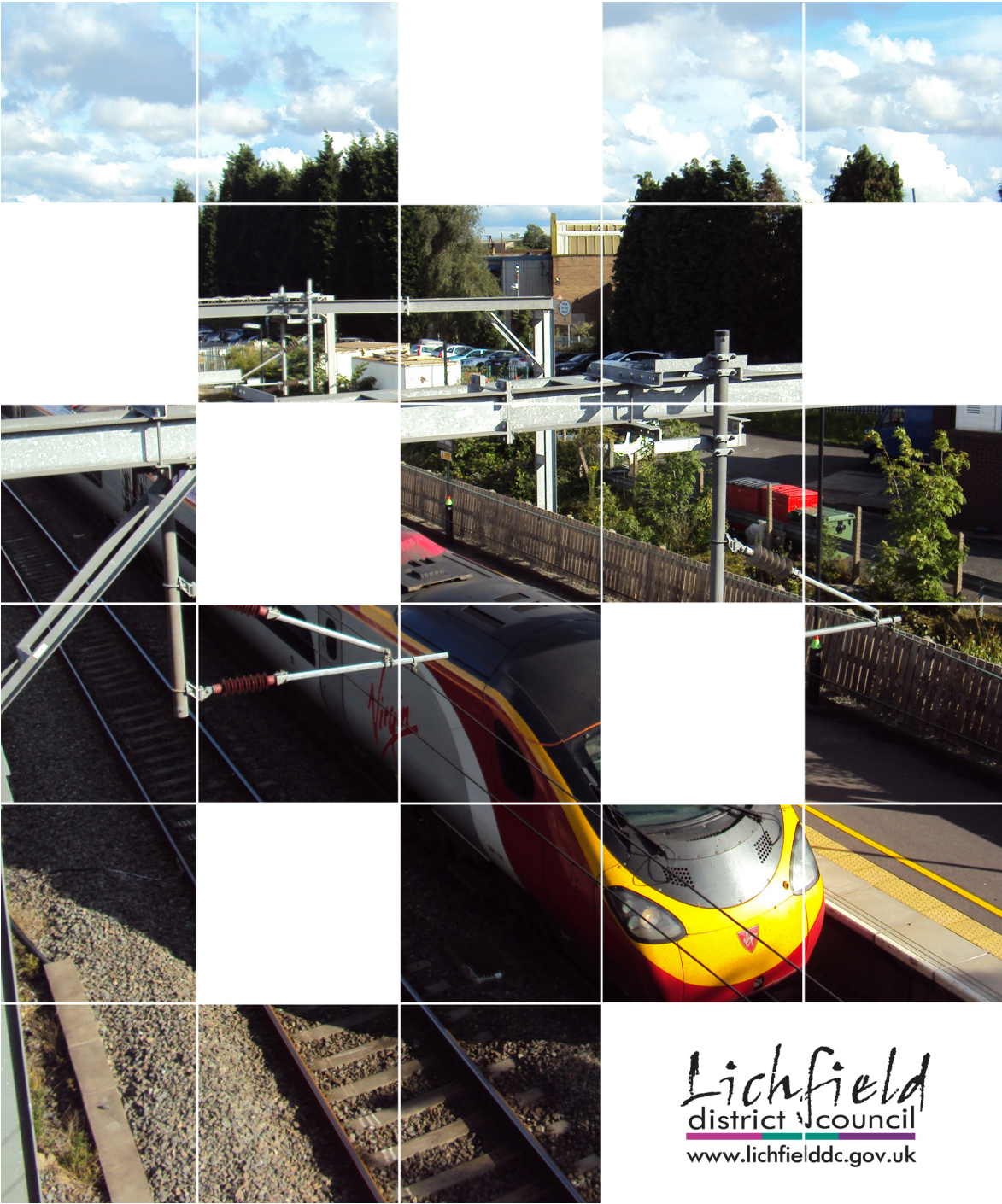


Infrastructure Delivery Plan



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 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, sports & 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 2028. 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 2028. 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 must be capable of being delivered to agreed timescales, in a way which addresses the vision, so that it properly 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. A sound infrastructure plan can therefore only be effectively developed through extensive consultation linked to the Local Plan.

1.8 The engagement process for infrastructure needs within Lichfield District commenced in March and July 2009 with a wide range of stakeholders (over 300 invited in total) discussing topics that covered environmental, social, community and physical issues. Sessions were held over three full days. A series of follow-up meetings have been held with individual stakeholders where there has been a need to gather further information. A draft Infrastructure Delivery Plan was consulted on as part of the 'Shaping our District' informal consultation stage from November 2010 - February 2011 and comments received have been taken into account in formulating this document.

1.9 The Infrastructure Delivery Plan will be regularly reviewed and monitored for its effectiveness, through the Annual Monitoring Report (AMR) and updated accordingly.

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.

2.2 The National Planning Policy Framework 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 the Local Plan, including the delivery of infrastructure.

Local Policy

2.4 The Local Plan 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' 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 Plan for Lichfield District 2012-2016 has been prepared in discussion with the Lichfield District Strategic Partnership and identifies the following strategic themes:

- **Supporting people:** We want our district to be a place where everyone shares in an improved quality of life and community well being.
- **Shaping Place:** We want our district to be a place people love to live, work and visit, with a high quality residential, community and commercial environment.
- **Supporting Business:** We want our district to be a place where businesses and enterprise can flourish, and there is a vibrant local economy.

2.6 Partners involved in developing and delivering the Sustainable Community Strategy and Plan for Lichfield District have been involved in the formulation of the IDP to date to ensure that capital infrastructure needs are included to address specific key priorities where a clear need can be evidenced.

Local Plan: Strategic Priorities

2.7 The Local Plan 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 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: The Spatial Strategy

2.9 The Spatial Strategy sets out the overall approach for the distribution of development in the District up until 2028 and the issues that need to be addressed when development takes place. The Spatial Strategy is as follows.

Core Policy 1: The Spatial Strategy

Lichfield District Council will contribute to the achievement of sustainable development to deliver 8,700 dwellings between 2008 and 2028 within the most sustainable settlements, making best use of and improving existing infrastructure. Throughout the District, growth will be located at the most accessible and sustainable locations in accordance with the Settlement Hierarchy (Table 4.1) and the key diagram (Map 4.1). Development proposals will be expected to make efficient use of land and prioritise the use of previously developed land (PDL). Proposals will promote sustainability by minimising and/or mitigating pressure on the natural, built and historic environment, natural resources, utilities and infrastructure and areas at risk of flooding, whilst also mitigating and adapting to climate change and reducing the need to travel.

The District Council will direct the majority of future development to the following locations, and will work with partners to deliver the infrastructure and facilities required to support this growth:

- Lichfield City Centre/Urban area
- South Lichfield Strategic Development Allocation
- East of Lichfield (Streethay) Strategic Development Allocation
- Burntwood Town Centre/Urban area including East of Burntwood Bypass Strategic Development Allocation
- Fradley Strategic Development Allocation
- East Rugeley Strategic Development Allocation (within Armitage with Handsacre Parish)
- North of Tamworth Broad Development Location
- Key Rural Settlements of Alrewas, Armitage with Handsacre, Fazeley, Shenstone and Whittington

The Spatial Strategy in relation to employment aims to promote greater opportunities for high value employment within the District, including higher wage opportunities in growth sectors related to business, education and research. Part of the strategy is to provide a balanced portfolio of employment land able to accommodate higher value employment opportunities serving both Lichfield and Burntwood and support for investment and redevelopment of older, well located, existing employment sites.

New and improved retail development will be focused on the commercial centres of Lichfield City and Burntwood. In accordance with the identified hierarchy of centres the role of Lichfield City will be protected and strengthened as our strategic centre, whilst an enlarged town centre at Burntwood to meet local retail needs will be supported. In the key rural villages, centres will be protected and enhanced to meet the day to day needs arising within these settlements and from the wider rural areas that they serve. Existing neighbourhood centres, serving the local needs of our urban communities will be supported and protected, whilst new neighbourhood centres to meet the local needs arising from the creation of new communities within our Strategic Development Allocations and Broad Development Locations will be developed.

Fradley will remain a focus for employment, but will also play a major role in meeting rural housing need with an expansion of the existing settlements. This will be supported by community, education and health facilities, as well as public transport measures and green infrastructure, to assist in the creation of a cohesive and sustainable community.

New rural housing will also be directed mainly towards five identified key rural settlements - Alrewas, Armitage with Handsacre, Fazeley, Shenstone and Whittington. Smaller villages will accommodate housing to meet local needs, mainly within identified village boundaries, unless supported as a rural exception site. Allocations of sites for new rural housing will be considered through the Local Plan Allocations document or through a community led plan where this is in broad conformity with the Local Plan.

Land to the North of Tamworth will assist in delivering further homes, in part, to meet the needs arising from within Tamworth's local housing market. However, the release of land to the north of the Anker Valley will be dependent on land being developed within Tamworth Borough first and key infrastructure being delivered within the Anker Valley.

To the east of Rugeley (within Armitage with Handsacre Parish) housing and employment growth will be focused on brownfield land at Rugeley Power Station identified through a Strategic Development Allocation. These homes will, in part, meet the needs arising from within Rugeley.

Development will be co-ordinated with an appropriate transport strategy to support sustainable lifestyles and help address climate change. In Lichfield City the completion of the southern bypass and improvements to the A38 and A5 are key highway improvement schemes that will be supported and facilitated. Rail travel will be enhanced through environmental and infrastructure improvements at Lichfield City Station. At Trent Valley Station accessibility will be improved and a new strategic parking facility will be delivered. Proposals for enhancing other rail stations within the District will be supported. To assist in sustainable transport improvements in the longer term, the rail route between Lichfield and Walsall (via Brownhills) will be safeguarded.

The District's significant high quality natural and built environment and key tourism assets will be protected and enhanced in their own right. This is vital to the particular distinctiveness and character of the District, providing opportunities for increased biodiversity, recreation, tourism, inward investment, improved health and wellbeing and sense of local identity. Significant assets include the District's important historic environment and natural, landscape and tourism assets which include conservation areas, Lichfield Cathedral (including views to and from), Cannock Chase Area of Outstanding Natural Beauty (AONB) and Special Area of Conservation (SAC), Chasewater Country Park, The National Forest and the Forest of Mercia, The National Memorial Arboretum, Drayton Manor Park, the restoration of the Lichfield Canal and the Central Rivers area.

Support will be given to maintaining and improving the health and wellbeing of residents including the delivery of a new leisure centre, or improvements to existing facilities to serve Lichfield City and its hinterland.

In relation to the District's existing communities and settlements, appropriate proposals which contribute to their improved sustainability, cohesion and community wellbeing will be supported. This includes taking account of plans which have been produced by local communities provided that these have been formulated using clear and robust evidence and are in broad conformity with the Local Plan.

The important role of the Green Belt will be recognised and protected, with the majority of new development being channelled towards the most sustainable urban areas of Lichfield and Burntwood, which are inset within the Green Belt.

Detailed changes to the Green Belt boundary around the edge of Lichfield City urban area to meet longer-term development needs beyond 2028 will be considered through the Local Plan Allocations document.

Minor changes to Green Belt boundaries may be appropriate for all settlements within the Green Belt, with the precise boundaries of these changes being determined through the Local Plan Allocations document or through a Neighbourhood Plan.

Limited infill development will also be allowed in Green Belt villages, with appropriate 'infill' boundaries being determined through local community consultation in preparing the Local Plan Allocations document.

Limited affordable housing for local community needs in the Green Belt will be supported on small rural exception sites where the development complies with Policy H2: Provision of Affordable Homes.

Opportunities to enhance the beneficial use of the Green Belt will be supported in line with the National Planning Policy Framework and local Policy NR2: Development in the Green Belt.

2.10 Infrastructure planning is so fundamental to the effective delivery of the Local Plan that Core Policy 4 states the following:

Core Policy 4: Delivering our Infrastructure

New development must be supported by the required infrastructure at the appropriate stage. The District Council will work in partnership with infrastructure providers, funding bodies, key stakeholders and other agencies and organisations to ensure a co-ordinated delivery of facilities and infrastructure to ensure that the District's communities function in a sustainable and effective manner. This includes continued joint working with other local authorities to facilitate cross boundary needs.

The District Council will seek to protect, and where appropriate improve, services and facilities that provide a key function in the operation of existing communities. Development proposals resulting in the loss of a key facility from a settlement, which is essential to the sustainable functioning of that settlement, will not be supported unless a replacement facility of improved quality, accessibility and size is provided for that community in a sustainable location.

New facilities must be located and designed so that they are integrated, accessible and compatible with the character and needs of the local community.

New development will be required to provide the necessary infrastructure at a timely stage to meet the community needs arising as a result. Development will also be expected to contribute, as appropriate, to strategic projects that support sustainable development and the wider community.

Both strategic and local infrastructure provision will be linked to the phasing of new development. Phasing and specific infrastructure requirements are set out in the Infrastructure Delivery Plan (IDP) and the Concept Statements relating to the Strategic Development Allocations (SDAs) identified in the Local Plan.

2.11 To expand upon this, the following Development Management policy applies:

Policy IP1: Supporting & Providing our Infrastructure

To ensure that all new development provides the necessary infrastructure facilities required to create and support sustainable communities, the following will be required:

- The District Council will require all eligible development to provide the appropriate infrastructure on and off site, in line with other policies of the Local Plan and the Infrastructure Delivery Plan;
- For the Strategic Development Allocations (SDAs) reference will be made to the relevant infrastructure requirements as set out in the Concept Statements and Infrastructure Delivery Plan;
- The viability of developments will also be considered when determining the extent and priority of development contributions in line with the Infrastructure Delivery Plan;
- Applications that result in a loss of an existing infrastructure service or facility will not be permitted, unless it can be demonstrated that the facility is clearly surplus to the requirements of the community, or a replacement and accessible facility of equivalent or improved quality is provided to serve that community, in a sustainable location.

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

- Completion of the Lichfield Southern Bypass to be delivered alongside the South Lichfield Strategic Development Allocation;
- 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 a new parking facility to serve Lichfield Trent Valley station;
- Delivery of secondary education to serve projected need (primary education is covered under the 'local' section);
- Delivery of improved indoor sports provision to serve Lichfield City and its hinterland.

2.13 These are detailed further in the Strategic Infrastructure section. The Local Infrastructure section also sets out essential site-specific needs.

2.14 Please note these policies are subject to formal consultation and examination prior to adoption.

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) provides a fair and consistent mechanism for pooling contributions from all eligible developments. It provides certainty so that developers can calculate, prior to land deals taking place, the level of contributions necessary.

Section 106 Agreements

Section 106 contributions can only be obtained when they meet three statutory tests. They must be:

- a. necessary to make the development acceptable in planning terms;
- b. directly related to the development; and
- c. fairly and reasonably related in scale and kind to the development

In addition, from after April 2014 'pooled contributions' for S106 funding will not be allowed, i.e. no piece of infrastructure will be able to be funded by more than five separate S106 agreements.

However, for employment-related and other non-residential developments section 106 agreements could continue to be the main mechanism for ensuring that contributions are made where necessary. All qualifying residential developments would have section 106 agreements to deliver affordable housing requirements. Site specific infrastructure could also be dealt with through a S106 agreement.

Planning Conditions

These are the main mechanisms for 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 new highway or improve the existing highway.

Explanation

3.3 Developer contributions secured towards the delivery of infrastructure to support new development are currently secured primarily through use of Section 106 funds ⁽ⁱ⁾. Whilst 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 more simple 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 Regulations 2010 (subsequently amended by the Community Infrastructure Levy (Amendment) Regulations 2011).

3.5 The 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. CIL receipts can be used to fund a wide range of infrastructure including roads, schools, hospitals and other health and social care facilities, park improvements, green spaces and leisure centres. Under Government proposals a meaningful proportion of CIL would also be allocated directly to communities who have development take place in their areas to spend on their local priorities.

3.6 To avoid overlap and unjustified costs being imposed on developers, at the same time as bringing in CIL, the Government has introduced changes to Section 106 obligations. Section 106 obligations will now be limited to addressing matters directly related to a development i.e. they will not be able to be used to address the wider and cumulative implications of a development in an area.

3.7 In addition, after April 2014, 'pooled contributions' for Section 106 funding will not be allowed i.e. no piece of infrastructure will be able to be funded by more than five separate Section 106 agreements. This will have an impact upon the ability to deliver strategic infrastructure such as roads, open spaces, or educational facilities for example. Affordable housing will continue to be delivered through Section 106 agreements however unless the regulations are changed as a result of a recent government consultation.

i Section 106 of the Town and Country Planning Act 1990

How CIL operates

3.8 Future infrastructure needs are defined in this Infrastructure Delivery Plan. This is a 'long list' which has been formulated as a result of extensive consultation and through the evidence base. It is recognised that infrastructure requirements would need to be funded by a variety of different sources. CIL is intended as 'gap funding' to help deliver infrastructure where there is a funding shortfall. It cannot be used to remedy deficiencies in existing infrastructure, only needs arising from new development.

3.9 CIL is charged as a tariff upon new development. Rates are charged per square metre. A viability assessment needs to be undertaken to ensure that rates are reasonable and will not undermine the delivery of sites within an area (in line with the development plan). Different rates could potentially be charged over different geographical areas or for different types of development (e.g. residential, commercial): viability work would help to inform this.

3.10 Once this work is completed then a charging schedule will be prepared. This needs to be independently examined by a body appropriately qualified to undertake this work. A charging schedule has to contain: the name of the charging authority, the CIL rates (set at pounds per sqm); an explanation of how the chargeable amount will be calculated; the adoption date and when it will take effect. Charging schedules have to be kept under review to ensure that CIL charges remain appropriate over time (for example as market conditions change). The Levy calculation formula is index-linked, but alterations to the rates would need to be re-examined.

3.11 Most new development involving over 100 sqm of floor space would be eligible to pay CIL. Some developments would be exempt. A charity landowner would get full relief from their portion of the liability where the chargeable development would be used wholly, or mainly, for charitable purposes. Social housing would get 100% relief. Relief could also be given in other 'exceptional circumstances,' for example where there are serious viability issues but this would be subject to independent scrutiny and the District Council would have to first give public notice of its intention to offer 'exceptional circumstances' relief.

3.12 The charging schedule itself would not specify what infrastructure would be funded by CIL. The list of infrastructure to be funded would have to be published in a 'Regulation 123 List'. This list could be changed and updated in line with priorities, but must be made publicly available at all times on the District Council's website. Section 106 could not be charged for infrastructure listed on the Regulation 123 list. This is to avoid double-charging.

3.13 Therefore the District Council would need to consider which items of infrastructure it would wish to see included in the Regulation 123 List and which it would want to still deliver via Section 106 (on a more site specific basis).

3.14 Up to 5% of CIL levies raised can be used to administer the programme.

3.15 The National Planning Policy Framework states that '*the Community Infrastructure Levy should support and incentivise new development, particularly by placing control over a meaningful proportion of the funds raised with the neighbourhoods where development takes place*' although further details are currently awaited.

Other funding

3.16 Not all infrastructure will be able to be funded via the aforementioned mechanisms. CIL is intended to plug a gap where it can be demonstrated that there is a funding shortfall. There will be other sources of funding over the plan period including New Homes Bonus, Tax Incremental Financing, Regional Growth Fund, Lottery funding, public and private sector investment, grant aid and a range of other options which will be applicable depending upon the nature of the infrastructure involved.

3.17 The process by which CIL is administered will require the District Council to prioritise which elements of infrastructure should be funded by CIL, and how much funding should be allocated. It is therefore one of the key roles of the IDP to set out clear requirements as to delivery timescales in relation to development trajectories, and details regarding funding based on the best available evidence. This is covered in the following chapters.

3.18 Throughout the plan period other sources, and amounts, of funding will vary and could relate to a variety of different themes. So it is important that the process of administering CIL also takes account of these other opportunities, to ensure that locally raised revenues are used to best effect.

4 Strategic Infrastructure

4.1 In order to deliver a sound 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 the public. 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. This chapter also deals 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 a number of small and varied projects which it is not possible to cost individually at this stage, although a few costed schemes are covered 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 sets out details for determining the strategic priorities in relation to achieving increasing levels of sustainable travel over the plan period. The Staffordshire Local Transport Plan 2011 sets out the strategic context, and this is then detailed more specifically for the District in the Lichfield District Integrated Transport Strategy 2011 - 2026. In addition, specific transport appraisals have been undertaken for Lichfield City and Burntwood, and specific analysis in relation to Fradley.

4.6 In terms of the requirements set out in the Lichfield District Integrated Transport Strategy, the following priorities are identified.

Priority 1

Lichfield District Integrated Transport Strategy 2011 - 2026 (projects)

County - wide

- 20mph zones and speed limit review
- Parking and loading enforcement through Clear Streets
- Driver training and road safety education and road safety education and training in schools
- Subsidised bus services, community transport, concessionary fares and bus service information
- Promoting sustainable travel and school travel planning
- Careful consideration of any requests to restrict lorry movements in line with actions and priorities in the Local Transport Plan Freight Strategy (2011)

Local community priorities

Short term (3 years)

- Maintenance programme
- Community liaison priorities raised by Councillors, focusing on local neighbourhood issues in rural and urban areas
- Pedestrian safety priorities in Hill Ridware, Armitage and Roman Way, Lichfield
- Vehicle speed reduction measures in local villages

Long term up to 2026

- Maintenance and community liaison priorities

Strategic planning and transport priorities

Short term - 3 years

- Complete Public transport Partnership route 765 Lichfield to Tamworth
- Completion of Pipehill road improvement
- Lichfield Southern Bypass detailed design work
- Lichfield City Centre Birmingham Road redevelopment scheme: new bus station, Lichfield City rail station enhancements, increase in car parking and signing and pedestrian improvements
- Potential coach park serving the City Centre

Medium term - up to 2023

- **South Lichfield Local Transport Package:** Complete Lichfield Southern Bypass, bus service to the urban extension development to the south of Lichfield, sustainable transport links to city centre, traffic management and urban traffic control, A5 (T) junction improvement, A38(T) junction improvements and route guidance and speed control
- **East Lichfield Local Transport package:** Improved bus / rail interchange facilities, traffic management and urban traffic control on A5127, pedestrian crossings, sustainable transport links to city centre and rail stations, A38 (T) route guidance and speed control and junction improvements at Hilliards cross and Fradley South, Fradley park traffic management, including HGV movements, and lorry parking facility.
- **Burntwood Local Transport Package:** new centrally located bus interchange, improve pedestrian environment on Cannock Road, bus route enhancements from Burntwood to Cannock and Lichfield
- Extend Enhanced Passenger Information in Lichfield, upgraded to Real Time Passenger Information (RTPI) as technology progresses
- Highway and bus service improvements to the east of Rugeley to accommodate housing development

4.7 The strategy sets out potential sources of funding. This includes funds remaining from the (now discontinued) Lichfield Transport and Development Strategy (LTaDS), CIL, Section 278 and Section 106 agreements.

4.8 Transport appraisals were carried out in 2009 relating to the Preferred Options for Lichfield City and for Burntwood Town⁽ⁱⁱ⁾. Staffordshire County Council are reconsidering these and updates will be available later in the year. The Transport Appraisals identify the following needs (based on 2009 calculations):

ii Staffordshire County Council Transport Appraisal of the Preferred Options for Lichfield City 2009 and Staffordshire County Council Transport Appraisal of the Preferred Options for Burntwood

Priority 2

Transport Infrastructure requirements identified from Transport Appraisals (2009)

- Promoting Smarter Travel Choices (excluding requirements directly associated with the Strategic Development Locations): Total cost £3.1m (£2.5m for Lichfield City, £0.6m for Burntwood). Smarter Travel Choices is a range of methods that can be used to reduce the use of cars including travel plans, public transport information and marketing and even telecommunications technology.
- Walking and cycling measures: Total cost £2.1m (£1.5m for Lichfield City and £0.6m for Burntwood)
- Public Transport measures (excluding Network Rail contribution) £5.7m (£4.5m for Lichfield City and £1.2m for Burntwood) NB the report advises that new homes should be within 350m of a bus stop.
- Making the best use of the existing transport network: Total cost £4.1m (£3.5m Lichfield City, £0.6m for Burntwood).

4.9 Improvements to the Strategic Highway Network: The Highways Agency 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 Agency supports the concept of a signalised access to the proposed site from the A5127 Burton Road;
- **Fradley:** there is not a capacity concern but careful attention will need to be given to safety issues given the sub-standard layout of the junction (A38 / Fradley Lane / Fine Lane);
- **Muckley Corner, Wall Island and Swinfen:** there are capacity issues relating to existing levels of queueing during peak periods, and the Highways Agency has produced plans for improvements to these roundabout junctions.

4.10 A comprehensive study of the A38 corridor is currently being undertaken by the Highways Agency, looking at modular improvements. The District Council is working with partners to look at this issue in more detail.

4.11 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.

4.12 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.

4.13 In terms of Lichfield District the strategy refers to the required improvements to the A38 in relation to the Wall Island and Muckley Corner junctions which also impact upon the A5. It also references improvements relating to the Mile Oak junction of the A5 which is located within Lichfield District but the need for which arise as a result of the impact of development within Tamworth Borough and hence are covered in the Tamworth Local Plan.

4.14 The evidence base and consultation with infrastructure providers, key stakeholders and the public has also highlighted the following transport infrastructure needs and issues.

4.15 In terms of **investment in rail services** the Department for Transport announced on 16th July 2012 that a national £9bn package of investment would be forthcoming to implement the 'High level Output Specification Programme 2014 - 2019' ⁽ⁱⁱⁱ⁾. This includes electrification of the Chase Line from Walsall to Rugeley Trent Valley Station. Further details of the programme are awaited and the IDP will be updated accordingly.

4.16 High Speed Rail Link: Phase 1 of a high speed rail link has been approved by Government (10th January 2012). This will cost £17bn and will link London with Birmingham, joining the West Coast Main Line in Lichfield District. Detailed planning work has now also begun on the route options from Birmingham to Manchester and Leeds, to allow for consultation on these routes at the same time. The estimated cost of this phase is £30bn. Phasing at this point (subject to the consultation) is uncertain: the first phase of the project is scheduled to begin in 2017.

Given that this is a national project there are no known local funding implications at this early stage of the scheme, but the IDP will need to be updated accordingly as the plan period progresses.

West Coast Main Line: A report ^(iv) has been prepared by Network rail in conjunction with Passenger Focus. This considers the impacts of the high speed rail link in terms of the capacity it would release on the West Coast Main Line, with potential improvements to the service including more direct services and less crowding on trains. As this study is an early consultation, there are no costings available, and given that this is a national scheme there are no known local funding implications at present.

4.17 Trent Valley Station (Lichfield): A range of improvements are required 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 Location.

iii <http://www.dft.gov.uk/news/press-releases/dft-press-20120716a>

iv Future priorities for the West Coast Main Line: Released capacity from a potential high speed line January 2012

4.18 A study was commissioned in 2001 by WS Atkins. This is still of relevance as the area has not changed significantly since the study was published, with the exception of the platforms being lengthened at the station to service longer trains, a small area of additional parking gaining planning permission, and an access ramp being installed at the ticket office. The following required improvements to the station have been identified:

- Disabled access;
- Improvements to on site car parking;
- Improvements to enable bus links to the site;
- New station building;
- Improved passenger information;
- Improved passenger waiting facilities; and
- 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.

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

4.20 Lack of funding has meant that the project has not progressed beyond some piecemeal improvements as mentioned above. Securing long term improvements is compromised by the franchising process (London Midland own the current franchise which expires in 2015). The total cost of improvements to the station and car parking facilities was estimated at almost £2.7m in 2001 although lack of overall progress has meant this cost has not been revised since. Using a basic prices and inflation calculator ^(v) this figure now equates to approximately £3.56m (April 2012).

4.21 However, further incremental improvements are scheduled to take place prior to 2014 in terms of replacing the ticket office and providing better passenger waiting facilities. These improvements are to be funded via Tranche Three of the National Stations Improvement Plan (NSIP)

4.22 The Department for Transport emphasises that it is current Government policy to deliver improved rail infrastructure in Strategic National Corridors in its policy document 'Delivering a Sustainable Transport System' (DaSTS) which includes the West Coast Main Line that serves this station.

4.23 Centro summarises the key issues in its response to the Department for Transport (DfT) consultation on the InterCity West Coast refranchising (March 2011), stating: *'Although managed by London Midland, Lichfield Trent Valley is an important station for InterCity West Coast passengers to London. The current station facilities are of poor quality and not fit for purpose, bidders should be invited to work jointly with London Midland to deliver an improved station. In particular, there is a need for the station to be made fully accessible by the addition of lifts or ramps to enable passengers to access the high level platforms and the Up (to London) platform, which can currently only be accessed via steep staircases. Car parking is also both a problem and an opportunity, as the existing car park is full to capacity very early in the morning. This is potentially leading to suppressed demand both for passengers*

v <http://www.thisismoney.co.uk/money/bills/article-1633409/Historic-inflation-calculator-value-money-changed-1900.html>

on the West Coast Main Line (particularly off-peak) and also passengers travelling into the West Midlands. We believe therefore that there is a need for an expanded or new car park at the station. The location of Lichfield Trent Valley, in close proximity to the A38, makes it particularly suitable for a strategic park and ride development^(vi).

4.24 Work is underway to take the proposals forward as a key priority in reducing levels of car usage and the IDP will be updated accordingly.

4.25 Rugeley Trent Valley Station: There are significant parking problems at Rugeley Trent Valley station. There are only 24 parking spaces, and rail users are reported to be parking on local roads, blocking access routes for residents and businesses. Lack of facilities (toilets, primarily) are also identified as an issue. A planning application was approved in 2011 for additional parking at the Yorkshireman pub for additional parking 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.

4.26 Shenstone Station: Via the consultation process an aspiration has been expressed to secure the increased frequency of services at Shenstone railway station. At present trains on the cross city line stop (in general) every half hour, compared to every fifteen minutes at Lichfield City and Blake Street (the stations either side). Investment in car parking infrastructure is also sought as, from comments received, the facilities are considered to be inadequate and not able to cater sufficiently for those wishing to lessen the length of journey travelled by car by using local rail facilities. The car park is owned by Network Rail.

4.27 Alrewas and the National Memorial Arboretum: There is a long term aspiration to deliver a station at Alrewas^(vii) to serve the village and the National Memorial Arboretum, as well as serving the National Forest and Central Rivers Initiative area.

4.28 Rail Freight: There is a long term aspiration / opportunity to reopen the line from Walsall via Brownhills and Burntwood to Lichfield initially for freight and then potentially for passenger services: this aspiration includes delivery of a station at Burntwood.

Energy

4.29 Gas and electricity: 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.

4.30 Renewable energy: 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.

vi Centro report to its Transport Strategy Committee, 28 March 2011)

vii Lichfield District Rural Planning Project 2011

4.31 The District Council is keen to support low carbon initiatives and will consider establishing a Carbon Investment Fund via CIL, to ensure that developments can deliver the required carbon reductions (in-line with local and national carbon targets) at the lowest possible cost. Carbon targets can be delivered entirely through on site measures by providing investment into energy efficiency and low / zero carbon energy generation technologies.

Water and Drainage

4.32 Water resources and supply: [The Southern Staffordshire Outline Water Cycle Study \(WCS\)](#) (July 2010) was undertaken in light of the proposed growth requirements relating to the West Midlands Spatial Strategy 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 revoked and is due to be 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 but there would be problems with higher growth scenarios across the study area which would require significant infrastructure investment.

4.33 In response to previous consultation stages of the Local Plan, 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:

Priority 3

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.

4.34 Waste Water Collection & Treatment: 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.

4.35 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:

Priority 4

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. *NB it should be noted that work is ongoing to address the SAC issues beyond Lichfield District's boundary and this is covered in Core Policy NR8 of the Local Plan.*

4.36 Water Management and Flooding: Issues need to be addressed on a district/sub-district basis as well at the local level where the Environment Agency has 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 and the Environment Agency.

4.37 Sustainable Drainage Systems (SuDS) also need to be provided by the developer, in line with national legislation and in accordance with Environment Agency 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 assessing with viability assessments in relation to individual developments.

4.38 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.

Waste

4.39 In terms of the collection and disposal of refuse, there will be a need for at least an additional two crewed collection wagons at a cost of £280,000 plus a one off cost of £60 per household for the provision of bins. This cost needs to be apportioned across all new development. Waste Services are delivered through a shared service with Tamworth Borough Council. Costs will be met through Council Tax.

4.40 In terms of waste disposal, Staffordshire County Council has identified ^(viii) the need for several new facilities within a number of broad locations. There is a need for a waste transfer station to be located in the south of the county which will enable municipal, commercial and industrial waste to be transferred to the energy-from-waste facility at Four Ashes in South Staffordshire, which has outline planning permission and is to be Private Finance Initiative (PFI) funded.

4.41 It is likely that a need will arise within the District for further household waste recycling centres, although the emerging Joint Waste Core Strategy does not include a requirement for any within Staffordshire at present.

4.42 With regard to construction, demolition and excavation waste, Staffordshire County Council have identified a need for four facilities county-wide, some of which could be located around Lichfield City, Cannock or Tamworth urban areas.

Communications

4.43 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. This problem has been recognised, and ongoing work with Staffordshire County Council and Broadband Delivery UK (BDUK) are actively seeking solutions to the issue: £7.44m has been allocated to Staffordshire and Stoke to deliver improvements prior to 2015.

viii Emerging Staffordshire and Stoke on Trent Draft Joint Waste Core Strategy 2010 - 2026, consultation September 2010

Town Centre improvements

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

4.45 The first element, to be delivered prior to 2016, is the redevelopment of the Friary Outer car park to deliver a hotel, expanded public car parking provision, sheltered housing and commercial space. Works began in 2012.

4.46 The second is the Friarsgate town centre improvement programme comprising retail and leisure facilities. This is also expected to be delivered prior to 2016. The economic downturn has delayed commencement of this project, however work is in hand to ensure that the project is in a state of readiness to take advantage of the expected economic recovery when this takes place.

4.47 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 conclude new specialist retail, increased public car parking, residential, leisure, office and community facilities through redevelopment of the car park and adjacent areas.

4.48 Burntwood: 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 required would require investment in the form of developer contributions and Lichfield District Council capital.

4.49 In order to deliver a safer environment in line with the Healthy & Safe Lifestyles policy theme, there is a need to undertake public realm improvements to Sankeys Corner, which would include measures to reduce crime and the opportunity for crime.

Tourism

4.50 Tourism infrastructure needs are covered primarily through the Town Centre improvements and, in relation to the natural environment, within Green Infrastructure.

4.51 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 is now being progressed. It is important that, over the plan period, the importance and role of cultural infrastructure is recognised.

4.52 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

4.53 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. However, there is no 'one size fits all' method to ensure that this happens, given that the employers' needs will change over time. In the first instance, employers will be encouraged to work with business and education partnerships to recruit and develop a local workforce. Much of the support needed is likely to be revenue funded e.g. skills development. No capital infrastructure needs have been identified at present but, if these arise during the plan period, they will be looked at on an 'as and when' basis.

4.54 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.

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)				
Short term package of improvements listed in the Lichfield District Integrated Transport Strategy 2011-26 (see Priority 1)	Will vary: Staffordshire County Council updating transport appraisals.	Developer Contributions and other funding streams	Short term prior to 2018	Staffordshire County Council
Long term local transport packages listed in the Lichfield District Integrated Transport Strategy 2011-26: <ul style="list-style-type: none"> • South Lichfield* • East Lichfield • Burntwood As set out under Priority 1 * Includes completion of Lichfield Southern Bypass	Will vary: Staffordshire County Council updating transport appraisals. Cost of bypass approx £10m including bridge costs est £4-8m (subject to Network Rail design work)	Developer Contributions and other funding streams. Lichfield Southern Bypass to be funded by developers and CIL or S106 (including majority of remaining LtADS funds of £775k. This includes £200k for a study by Network Rail's consultants to design the	Phased approach aligned to development trajectory, covers short, medium and long term up until 2028. Bypass - medium term 2018 - 23.	Staffordshire County Council

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
		underbridge (road / canal) to the cross city line).		
Transport: improvements to the Strategic Road Network				
Muckley Corner	£5m	Central Government Developer Funding (S278 / CIL)	Medium term 2018 - 2023	Highways Agency Developers
Wall Island	£9.1m	Central Government Developer Funding (S278 / CIL)	Medium term 2018 - 2023	Highways Agency Developers
Swinfen	£6.2m	Central Government Developer Funding (S278 / CIL)	Medium term 2018 - 2023	Highways Agency Developers
Further junction improvements on A38	Information not yet available.	Sources will vary	Medium to long term 2018 - 2028	Lichfield District Council working with partners to secure long term improvements.
Transport: Rail				
Station improvements: Lichfield Trent Valley to include new parking facility, improved bus links, new station building & improved passenger waiting facilities and information, increased frequency of cross city connections.	£3.56m	National Stations Improvement Plan (for ticket office and shelters), 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.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Addressing capacity on West Coast Main Line	No costings available	Network Rail with service providers	Medium to long term	Network Rail
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	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.
Reopen line from Walsall to Lichfield via Brownhills and Burntwood: initially for Freight and then for passenger services, to include delivering a station at Burntwood.	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.	Costs will vary depending on schemes	Developer and developer contributions with a range of other sources as applicable to the scheme.	Throughout the plan period	Developer, working with Lichfield District Council and Ofgem.
Water resources				
Water supply: major upgrades required for Burntwood.	Details between South Staffordshire Water and developers.	South Staffordshire Water with developers.	In line with development trajectories.	Developer working with South Staffordshire Water.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
Minor upgrades to: Fradley Airfield, Streethay, Fazeley, South Lichfield. See Priority 3.			Short to medium term Burntwood, Fradley, Fazeley and South Lichfield (prior to 2018); medium term for Streethay (prior to 2023).	
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).
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
Waste				
Provision of two crewed wagons	£280,000	Lichfield District Council.	Medium	Lichfield District Council
Waste facilities to be delivered in line with the Staffs and Stoke on Trent Joint Waste Core Strategy	Costs will vary	Staffordshire County Council.	Ongoing throughout plan period	SCC
Communications				
Broadband improvements across the District, including rural areas.	Costs will vary across the District depending on projects.	Broadband Delivery UK (£7.44m allocated across Staffordshire).	Short term prior to 2015 (BDUK projects) and ongoing throughout plan period.	Staffordshire County Council with BDUK and other providers.
Town Centre Improvements				

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
<p>Lichfield City Improvements:</p> <ul style="list-style-type: none"> • Friary Outer (hotel, commercial space, sheltered housing, parking); • Friarsgate (retail and leisure); • Bird Street car park redevelopment. 	<p>Friary Outer £14m</p> <p>£100m investment value (Friarsgate)</p> <p>Bird Street - no information currently available.</p>	Mainly private sector funding	Friary Outer and Friarsgate short term (prior to 2018), Bird Street after completion of Friarsgate.	Private sector led in partnership with Lichfield District Council
Burntwood Town Centre improvements: improved retail, community facilities and leisure to deliver a town centre.	Not available.	Mainly private sector 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.	Around £370,000 (Sankeys Corner) and around £130,000 (parking).	Sources will vary, including CIL / S106	Short term	Staffordshire County Council, Lichfield District Council, Burntwood Town Council, developers and other partners as applicable.
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	Schemes will vary	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

4.55 The Local Plan 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.

4.56 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, subject to viability testing. 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. However to address rural needs and sustainability within the larger rural communities (as set out in the rural settlement hierarchy), affordable housing will be required on housing developments for 5 or more dwellings or sites over 0.2 ha in size, and 100% on small rural exception sites. The detailed criteria are set out in Policy H2. This lower threshold reflects the smaller nature of sites that are likely to be delivered in the rural area. The dynamic viability model for affordable housing delivery is set out in **Appendix A**.

4.57 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

4.58 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 may have an effect on local school roles. In some cases the existing primary and secondary school roles do not have spare capacity. In addition, increasing school roles puts increased 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 development, or where it would place pressure on restricted infrastructure.

4.59 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, 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.

4.60 New or enlarged primary schools (incorporating nursery provision) will be required at the following Strategic Development Allocations: Fradley, Streethay and South Lichfield. However, 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.

4.61 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.

4.62 The raising of the education participation age will have implications for infrastructure over the plan period. This will not just relate to schools, through an anticipated slight increase in sixth form attendance, but will require more work place opportunities, 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.

4.63 A £2.5m vocational centre was opened in 2010 through a partnership between the area's five secondary schools, Saxon Hill and Queens Croft schools, Stowe teaching unit, South Staffordshire College and local training providers. The focus is on 14 to 19 year olds, but the centre is available at evenings and weekends for adult learning.

4.64 Staffordshire Local Education Authority have identified costings of £19.9m over the plan period for investment in secondary and post 16 education. Primary schools are covered in the Local Infrastructure chapter.

Community Provision

4.65 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.

4.66 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.

4.67 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 (as it is a 'living' document which will be regularly

updated). For example the Fire Service has been redeveloping (via PFI funding) a number of fire stations which incorporate community facilities. It is particularly important that the needs of the voluntary sector and organisations supporting and developing communities are recognised and addressed.

4.68 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 Locations 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

Health and wellbeing

4.69 Health centres/doctors surgeries: The Primary Care Trust has identified the need for new / additional provision in Burntwood and this is currently being addressed at a site adjacent to the leisure centre to be delivered in 2012 / 13.

4.70 In terms of Fradley, the PCT currently advises 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. In the longer term however the District Council would wish to see some services delivered in the village itself, either in a bespoke unit (in 2010 the PCT indicated that a 2 GP surgery would cost in the region of £350,000) or as outreach provision.

4.71 In terms of the key rural settlements, there may be future capacity issues at Fazeley, but this will need to be clarified at the Land Allocations stage of the Local Plan.

4.72 Accessibility: 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 the Disability Partnership Panel is sought at the earliest opportunity.

4.73 Residential care provision: With projected population increases, Staffordshire County Council has identified the need to increase levels of residential care for children and adults with high levels of physical and mental dependency. Schemes will vary throughout

the plan period with Staffordshire County Council continuing to assess ongoing need and lead on provision. Any relevant strategic schemes will be included in the IDP as the plan period progresses.

4.74 Arts and Cultural Facilities: 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 need for public art to be incorporated into new developments.

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

4.76 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.

4.77 Indoor sports provision: Facilities Planning Modelling has 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 has been 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. A Sports and Physical Activities Strategy is being prepared which will inform how the need identified should be met within the District. The cost of providing a stand alone leisure centre of the same scale as Burntwood Leisure Centre would be in the region of £12m (Burntwood Leisure Centre cost £9m in 2001). Alternatively, improvements to existing leisure facilities in Lichfield City equivalent to that provided by a new leisure centre should be supported.

4.78 Playing Pitches: 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.

4.79 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.

4.80 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, and in conjunction with this the Beacon Park tennis courts should be developed as a key tennis facility. Work with the LTA is also needed to develop the tennis club infrastructure in Burntwood. Parish Councils should also be supported in developing local facilities where there is identified latent demand.

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

4.82 It costs around £60,000 - £100,000 to deliver a playing pitch depending upon the site in question, land conditions, topography and other local circumstances. Changing blocks cost around £250,000 for a 2-team block, and £350,000 for a 4-team block. Overall it is preferable to concentrate facilities on multi-pitch sites where possible.

4.83 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. This could include provision for croquet, American Football, cycling, walking, skateboarding, outdoor gyms to name a few examples which are also played / utilised within the District.

4.84 Skate Park: In terms of skateboarding, the lack of activities locally for young people has led to the need for a skate park being identified to serve the District, located in Beacon Park. This will cost £100,000, and there is a desire to see this delivered in the short term i.e. before 2018. The project is being led by Lichfield City Council.

4.85 Community Safety: In strategic terms, the need for CCTV has been highlighted through the consultation process, particularly relating to town centres and also hotspots for crime and antisocial behaviour. However, it is considered that CCTV should be installed only as a last resort in terms of infrastructure planning, with clear evidence being produced that this is the only feasible option, or a short term solution whilst other longer term solutions are sought, e.g. by designing out crime, which could include natural surveillance. In public places, particular regard must be had to the Governments Crowded Places agenda^(ix) and infrastructure planning should be developed accordingly.

4.86 Specific community safety infrastructure projects will be included in the 'local infrastructure' section of the IDP where relevant as the document is updated and the plan progresses.

Table 4.2 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 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).	Throughout plan period in line with trajectory	Mainly developers but schemes will vary.
Education and skills				
Secondary education and post - 16 education (NB Primary school needs covered under 'local infrastructure').	£19.9m	Combination of public sector funding and developer contributions (S106 / CIL) for secondary education	Throughout plan period in line with trajectory	Staffordshire County Council
Community provision and community safety				
Community provision - detailed area and site specific proposals covered under 'local infrastructure'	Will vary	Sources will vary: may include developer	Throughout plan period	Parish and Town councils in partnership with community

ix Crowded Places: the Planning System and Counter Terrorism, Home Office January 2012

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
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.		contributions, S106 / CIL		/ voluntary sector
Health, sport and recreation				
Health centres - covered under Local Infrastructure (Burntwood and Fradley). Fazeley may need investment - to be determined at land allocations stage.	See local infrastructure	See local infrastructure	See local infrastructure	See local infrastructure
New leisure centre or upgrade to existing facilities to serve Lichfield City and the surrounding rural communities.	£12m	Public funding and developer contributions (S106 /CIL)	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 (S106 or CIL).	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'.	Schemes will vary	Depending on the scheme, funding from grant aid, public bodies, developer contributions (S106 / CIL).	Ongoing throughout plan period	Lichfield District Council in partnership with Parish and Town Councils.
Skate Park in Beacon Park (Lichfield) but to serve wider strategic need.	£100,000	Grant aid, public bodies, developer contributions (CIL / S106)	Short term (prior to 2018).	Lichfield City Council in partnership with others.

Strategic Green Infrastructure

4.87 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*'.

4.88 The District Council is developing a detailed study of the Green Infrastructure needs, to include canals, rivers, wetland and floodplain ('blue infrastructure'). This study will utilise a range of evidence such as the Open Space, Sport and Recreation Assessment, Historical Environment Character Assessment and Biodiversity Action Plan and will also look at linkages and connections with other areas across the District boundary. This study will complement the IDP and will help to shape priorities for investment in the future.

4.89 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.

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

Open Space

4.91 The Open Space Assessment 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

4.92 The Open Space Assessment looks at issues in terms of quantity, quality and accessibility, identifies areas of shortfall (highlighted in the 'local infrastructure' chapter) and sets standards for provision which are set out in Policy HSC1 of the Local Plan.

Sport and Recreation

4.93 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

4.94 The Cannock Chase AONB contains a Special Area of Conservation (SAC): a strictly controlled site protected by the European Habitats Directive. All development in the District, which falls within 12 miles of the Cannock Chase SAC, will need to provide measures for mitigating the impact upon the SAC in line with the Visitor Mitigation Strategy.

Central Rivers Initiative

4.95 The Central Rivers Initiative is a partnership project to develop a network of thriving water parks and nature reserves along the Trent and Tame river corridors, along with complementary infrastructure projects for example walks and cycleways, marina and hotel facilities and improved rail access. The partnership is between Lichfield District Council, Tamworth and East Staffordshire Borough Councils, private landowners, the National Forest and Staffordshire Wildlife Trust. The project is in its early stages, 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, Forestry Commission and Natural England Higher Level schemes. The IDP will be updated as the project progresses.

Chasewater Country Park

4.96 Significant infrastructure requirements are required to Chasewater Country Park, in terms of enhancing and protecting its natural assets (much of the site is a designated Site of Special Scientific Interest) and the need to improve public access. 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.

4.97 A wider programme of improvements to Chasewater Country Park, including recreational, tourism and economic links is proposed by Staffordshire County Council who own the site.

Restoring the Lichfield Link: heathland projects

4.98 The sustainable management of heathland across the District is a key priority. In addition to the works outlined at Chasewater Country Park (above), heathland management schemes are being developed at Muckley Corner (Wall Butts Common), Pipehill Crossroads

(Pipe Hill Heathlands or Pipe Marsh Common), Ironstone Road heathland and Gentleshaw Common (the latter is a HLS scheme). While these schemes are dependent upon the input of the voluntary sector, funding is sought for larger scale works at Pipehill and Ironstone Road involving turf-stripping and heather seeding for an area of around 0.5ha. and additional funds will be required to introduce grazing at Ironstone Road. 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

4.99 A review of canal conservation areas to ensure appropriate enhancement and protection to inland waterways is scheduled to take place prior to 2016. The review will cost Lichfield District Council approximately £20,000. Once complete, this will show any infrastructure works which will be required and the IDP will be updated accordingly.

4.100 The restoration of Lichfield and Hatherton Canal is being led by the Lichfield and Hatherton Canal Trust. The Lichfield Canal project is estimated to cost £50m in total and is likely to be implemented post 2016 in three 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, the Manifold Trust and possible grant funding.

Woodlands and hedgerows

4.101 National Forest woodland and non woodland creation is proposed including supporting the Long Distance Trail. The delivery will be led by the National Forest Company and funding will be via the National Forest Company incentives and the England Woodland Grant. The scheme will be delivered prior to 2016 and the IDP will be updated as the project progresses.

4.102 Wider improvements to woodland and hedgerow areas and habitats for priority protected species, and the creation of new woodlands, hedgerows and habitats for priority protected species will be addressed throughout the plan period as opportunities arise.

Local Nature Reserves

4.103 110 hectares of open space has to be declared as a Local Nature Reserve. Work is ongoing at Christian Fields to the north of Lichfield and further work is needed, both with regard to this site and in designating other sites across the District.

Table 4.3 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	Costs will vary	Sources will vary: public, private, grant	Throughout plan period.	Implementation will vary although the strategic framework

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
emerging Green Infrastructure study and evidence from local communities. Specific areas of deficiency or need are highlighted under 'Local Infrastructure'.		aid, developer contributions (S106 / CIL)		is set by 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) in line with the Visitor Mitigation Strategy.	Costs will vary	Sources will vary but mainly developer contributions (S106 / CIL)	Throughout plan period to align with trajectory.	Cannock Chase SAC Partnership
Central Rivers Initiative				
Network of water parks and nature reserves along the Trent and Tame river corridors with associated projects such as walkways, cycleways etc	Costs will vary	Sources vary e.g. mineral companies, National Forest Company incentives, Environment Agency, Forestry Commission, Natural England Higher Level schemes, Developer Contributions (S106 / CIL)	Throughout plan period	Central Rivers Initiative
Chasewater Country Park				
Improvements to Chasewater Country Park, including maintenance and enhancement of landscape character, protection of natural resources & historic environment and promotion of public access & understanding of the countryside.	£450,000 (HLS)	Higher level stewardship Scheme, potential developer contributions, other sources of public / private / grant funding.	Short term (prior to 2018) for the HLS scheme and other improvements beyond this.	Staffordshire County Council and Lichfield District Council
Heathland				
A programme for sustainable heathland management across the District including Muckley Corner, Pipehill Crossroads and Ironstone Road.	Will vary	Sources will vary S106 / CIL	Throughout plan period (work already underway and needs continuing)	Lichfield District Council in partnership with the voluntary sector and others.

Infrastructure Requirement	Cost	Funding	Phasing	Delivery Lead
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 will inform more specific future infrastructure needs in those areas.	Costs will vary. Canal conservation area review will cost £20,000	Sources will vary: grant aid, public and private funding, developer contributions (CIL) Lichfield District Council to fund conservation area review work.	Throughout plan period	Will vary depending on the project but Lichfield District Council to provide the strategic context in partnership with others, implementation to be led by British Waterways.
Restoration of the Lichfield Canal	£50m	Trust member contributions, David Suchet Appeal, Inland waterways Association, Manifold Trust grant funding, possible developer contributions	Medium to long term	Lichfield and Hatherton Canal Trust.
Woodlands and hedgerows				
Improvements relating to the National Forest including support for the Long Distance Trail	Will vary	National Forest Company Incentives and the England Woodland Grant	Long Distance Trail - short term prior to 2018. Other initiatives ongoing.	National Forest Company.
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 (S106 / CIL)	Ongoing throughout plan period	Lichfield District Council in partnership with others.
Local Nature reserves (LNR)				
Achieve 110 ha LNR open space across the District and develop infrastructure to support this,	Will vary	Grants, S106 / CIL. Other sources	Ongoing throughout plan period.	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.

5.2 It should be noted that developer contributions refer to CIL and Section 106 at this point. This is because it has not yet been determined which pieces of infrastructure will be funded by which particular mechanism. This will be set out when the CIL Charging Schedule and Regulation 123 List is produced and the IDP will then be updated accordingly.

Lichfield City

5.3 Lichfield City's non site-specific infrastructure needs are covered primarily in the Strategic Infrastructure chapter (for example leisure, transport and town centre development). In the future, more localised issues may be set out in a town plan, or series of plans depending upon how the community wishes to proceed and the IDP will be updated accordingly. In terms of open space requirements, reference can be made to the details contained within the Open Space Assessment 2012, 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

5.4 450 homes will be delivered to the South of Lichfield between 2016 and 2021. These will be delivered as follows:

Table 5.1 South of Lichfield SDA Housing Trajectory

Year	2016/17	2016/17	2017/18	2018/19	2020/21
Approx. completions	50	100	100	100	100

5.5 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 South of Lichfield SDA site specific infrastructure needs.

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
Physical Infrastructure				
The primary source of access to the central neighbourhood area to be a road leading from the Lichfield Southern Bypass (see Strategic Infrastructure regarding the Lichfield Southern Bypass). Design of the internal road network to accord with the Manual for Streets.	Developer	Developer	Work to begin at outset of development (2016) to allow for construction traffic to access the site.	Developer with Staffordshire County Council

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
Provision of new bus services, 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 (2016 - 2021)	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	Developer and CIL / 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.
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 with CIL / S106 depending on design of scheme.	Alongside construction to begin 2016	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 2016	Developer
Social and Community Infrastructure				

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
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.	2016 - 2021	Developer in partnership with other organisations as applicable.
New primary school, one form entry 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.	£4m	CIL or 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	CIL or S106.	Alongside development of the site, to be completed by 2021.	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 Development (Amendment) order 2005. The hub must also incorporate , or be adjacent to, facilities which can be used for playing pitches, sport and recreation.	Cost will vary	Developer.	Alongside development of the site, to be completed by 2021.	Developer.
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).	CIL or S106	Alongside development of the site, to be completed by 2021 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	Will vary	CIL or S106	Alongside development of the site, to be	Developer in partnership with Lichfield District

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
development are within 480m / 10 minutes walk time of an equipped play facility in line with Development Management Policy HSC1.			completed by 2021 with an ongoing programme for maintenance.	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 / CIL or S106	Alongside development of the site, to be completed by 2021 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 2021 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 or S106 (see strategic infrastructure)	See strategic infrastructure.	See strategic infrastructure
Public art to be a feature of the development	Will vary	CIL or S106	By 2021	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 2021 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	Will vary	Developer CIL or S106	Alongside development of the site, to be completed by 2021	Developer working with the Lichfield Canal Restoration Trust

Infrastructure Requirement South of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
recreation uses. The linear form of this corridor will be opened up in places to provide public amenity space.			with an ongoing programme for maintenance.	
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 CIL or S106	Alongside development of the site, to be completed by 2021 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 CIL / S106	Alongside development of the site, to be completed by 2021 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 2021 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 CIL / S106	Alongside development of the site, to be completed by 2021 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

5.6 750 homes will be delivered to the East of Lichfield between 2018 and 2026. These will be delivered as follows:

Table 5.3 East of Lichfield (Streethay) SDA Housing Trajectory

Year	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Approx. completions	50	100	100	100	100	100	100	100

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 5.4 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 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.	To be confirmed between developer, Staffordshire County Council and Highways Agency.	Developer S278 CIL or S106	To be agreed between the developer and Staffordshire County Council / Highways agency.	Developer with Staffordshire County 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.	CIL or S106	Prior to first occupation (2018)	Developer with Staffordshire County Council
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	CIL or S106	Prior to completion (2026)	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 Staffordshire County Council and service providers.	Alongside first occupation (2018)	Developer with Staffordshire County Council and service providers.

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
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	CIL or S106	Alongside first occupation (2018)	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 (2018)	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 (before 2018)	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 2018.	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 2018.	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	Costs will vary	Will vary - developers, public funding, S106, grant funding, Registered	2018 - 2026	Developer in partnership with other organisations as applicable.

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
needs and will be pepper-potted within the development and shall be indistinguishable from open market housing.		providers, housing associations, charitable bodies etc.		
New primary school, one or one and a half form entry 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.	£4m-£5.5m	CIL or 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	CIL or S106	Alongside development of the site to be completed by 2026.	Developer in partnership with Lichfield District Council or Lichfield City 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 can be used for playing pitches, sport and recreation.	Cost will vary	Developer	Alongside construction to begin 2014.	Developer
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).	CIL or S106	Alongside development of the site, to be completed by 2026 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	CIL or S106	Alongside development of the site, to be completed by 2026 with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Lichfield City Council.

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
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 / CIL or S106	Alongside development of the site, to be completed by 2026 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 23 plots min.	Will vary	Developers / CIL or S106	Alongside development of the site, to be completed by 2026 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 or S106 (see strategic infrastructure)	See strategic infrastructure.	See strategic infrastructure.
Public art to be a feature of the development.	Will vary	CIL or S106	By 2026	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 2026 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')	Will vary	Developer CIL or S106	Alongside development of the	Lichfield District Council with developer and in partnership with

Infrastructure Requirement East of Lichfield SDA	Cost	Funding	Phasing	Delivery Lead
infrastructure). These need to be carefully designed to take into account natural surveillance and the amenity of neighbouring residents.			site, to be completed by 2027 with an ongoing programme for maintenance.	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 CIL or S106	Alongside development of the site, to be completed by 2026 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 or S106	Alongside development of the site, to be completed by 2026 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. The existing settlement is clearly defined by mature hedgerows along Burton Road and this characteristic will be incorporated into any proposal.	Will vary	Developer CIL or S106	Alongside development of the site, to be completed by 2026 with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Burntwood

5.8 Burntwood Town Council have produced the Burntwood Town Strategy (2011) which sets out a number of priorities for the area. In terms of infrastructure these can be summarised as follows:

- Delivery of a town centre (see also Strategic Infrastructure) and associated environmental improvements (e.g. to Sankeys Corner);

- Improvements which help to identify Burntwood more strongly and coherently as a place;
- 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;
- Delivery of a range of housing, especially of brownfield land, and especially for families and young people;
- Support for businesses;
- Measures to reduce / prevent crime and anti-social behaviour;
- Local environmental improvements;
- Improved pathways and trails, including links to Chasewater Country Park;
- 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 facilities and making best / more effective use of existing ones;
- Improvement and delivery of learning and training opportunities in the area
- 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.
- Developing volunteering / community participation;
- Developing partnerships including those addressing environmental sustainability and biodiversity support.

East of Burntwood Bypass Strategic Development Allocation

5.9 375 homes will be delivered to the East of Burntwood Bypass between 2015 and 2021. These will be delivered as follows:

Table 5.5 East of Burntwood Bypass SDA Housing Trajectory

Year	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Approx. Completions	50	75	75	75	75	25

Table 5.6 East of Burntwood Bypass SDA site specific infrastructure needs.

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 (2014)	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	Will vary	Developer and CIL / S106	Prior to first occupation (2014)	Developer with Staffordshire County Council.

Infrastructure Requirement East of Burntwood SDA	Cost	Funding	Phasing	Delivery Lead
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. 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 (2014 -20)	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 (2014)	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.	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	Developer, possibly with CIL / S106 depending on design of scheme.	Alongside construction to begin 2014.	Developer with Environment Agency.
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	Costs will vary	Will vary - developers, public funding, S106, grant funding, Registered providers, housing associations,	2014 - 2020	Developer in partnership with other organisations as applicable.

Infrastructure Requirement East of Burntwood SDA	Cost	Funding	Phasing	Delivery Lead
indistinguishable from open market housing.		charitable bodies etc		
The development will contribute to the provision of improved community facilities in the wider Burntwood area to help to maximise the use of existing facilities.	Costs will vary	CIL / S106	2014 - 2020	Burntwood Town Council, Lichfield District Council in partnership with others 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 1.06ha min.	Costs will vary depending on provision and whether on or off - site. 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).	CIL or S106	Alongside development of the site, to be completed by 2020 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	CIL or S106	Alongside development of the site, to be completed by 2020 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 / 10 minutes walk time of an amenity green space in line with Development Management Policy HSC1. For this site this is 1.23ha min.	Will vary	Developers / CIL or S106	Alongside development of the site, to be completed by 2020 with an ongoing programme for maintenance.	Developer in partnership with Lichfield District 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 / CIL or S106	Alongside development of the site, to be completed by 2020 with an ongoing programme for maintenance.	Developer in partnership with Lichfield District Council and Burntwood Town Council and allotments organisations.

Infrastructure Requirement East of Burntwood SDA	Cost	Funding	Phasing	Delivery Lead
Contributions to education as detailed under 'strategic infrastructure'.	See strategic infrastructure.	CIL or S106	See strategic infrastructure.	See strategic infrastructure.
Public art to be a feature of the development.	Will vary	CIL or S106	By 2020	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 CIL / S106	Prior to development taking place (before 2014)	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 2014-2020	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 CIL / S106	Alongside development of the site, to be completed by 2020 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 2020 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
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 CIL / S106	Alongside development of the site, to be completed by 2020 with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Rural Areas

5.10 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

5.11 1,000 homes will be delivered in Fradley between 2014 and 2025. These will be delivered as follows:

Table 5.7 Fradley Housing Trajectory

Year	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Approx completions	70	100	100	100	100	100

Table 5.8 Fradley Housing Trajectory (cont.)

Year	2020/21	2021/22	2022/23	2023/24	2024/25
Approx completions	100	100	100	100	30

Table 5.9 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 2014 - 25	Developer with Staffordshire County Council.
Junction access on to the A38 will be improved where necessary, and also local connections to the surrounding villages and Lichfield. Measures will	Will vary	S278	Alongside development 2014 - 25	Developer with Staffordshire County Council

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
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.				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, especially to the school to encourage walking for all.	Will vary. Indicative cost of a pedestrian crossing is around £60,000 but other options also to be considered.	CIL or S106	Alongside development 2014 - 25	Developer with Staffordshire County Council
The design of the internal road network shall accord fully to the principles of Manual for Streets.	Will vary	Developer	Alongside development 2014 - 25	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.	Will vary	Developer with Staffordshire County Council and service providers.	Alongside development 2014 - 25	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 2014 - 25	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 2014 - 25	Developer with Staffordshire County Council.
Provision will be made for sufficient mitigation of the effects of the adjacent industrial park. 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 2014 - 25	Developer

Infrastructure Requirement Fradley SDA	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	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	Developer, possibly with CIL / S106 depending on design of scheme.	Alongside construction to begin 2014.	Developer with Environment Agency.
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	2014 - 2025	Developer in partnership with other organisations as applicable.
The development should create neighbourhood facilities to extend the range of services available at the exiting 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	CIL or S106	Alongside development of the site to be completed by 2025.	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 (given that the PCT have identified capacity within Lichfield and at Alrewas) there should be a longer term aim to deliver services directly to the community	Will vary. PCT originally provided an indicative cost of £350,000 for construction of new doctors surgery but	Health organisations, CIL or S106	By 2025	Health care providers with Lichfield District Council and developers.

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
either in a bespoke unit or as outreach provision.	have since indicated that other options need to be considered.			
Adequate primary school provision shall be made, which should consider first the options of extending St. Stephen's primary school with alternative (new) provision if necessary. Total provision across Fradley as a whole would need to equate to 3 Form Entry with Early Years provision and potentially a children's centre.	Will vary depending upon agreed approach.	CIL or S106	Phasing / trigger points to be agreed with Staffordshire County Council	Developers with Staffordshire County 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. 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.	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).	CIL or S106	Alongside development of the site, to be completed by 2025 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	CIL or S106	Alongside development of the site, to be completed by 2025 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	CIL or S106	Alongside development of the site, to be completed by 2025 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	CIL or S106	Alongside development of the site, to be completed by 2025 with an ongoing	Developer in partnership with Lichfield District Council and Allotments organisations.

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
			programme for maintenance.	
Contributions to secondary / post 16 education, and improved leisure facilities for Lichfield City as detailed under 'strategic infrastructure'.	See strategic infrastructure	CIL or S106	Throughout plan period	Staffordshire County Council
Public art to be a feature of the development.	Will vary	CIL or S106	By 2025	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 adequate facilities from the outset of site occupation. A clear phasing strategy will be required to achieve this.	Developer working with Lichfield District Council.
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 CIL or S106	Alongside development, to be completed by 2025 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	Developer CIL / S106	Prior to development taking place (before 2014)	Developer with Lichfield District Council.

Infrastructure Requirement Fradley SDA	Cost	Funding	Phasing	Delivery Lead
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	Developer CIL / S106	Alongside development, to be completed by 2025 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 CIL / S106	Alongside development of the site, to be completed by 2012 with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

Key rural settlements

5.12 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.

5.13 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 bridge 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);
- Improvements to the canal including the towpath and additional moorings to encourage more tourism.

5.14 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.
- New or improved equipped play, particularly relating to the areas around Upper Lodge Road and Millmoor avenue and including the relocation of the Upper Lodge Road play area;
- 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.

5.15 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 depending on outcomes of the Local Plan Allocations document;
- Well designed housing to address local need as set out in Policy Faz4.

5.16 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.

5.17 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.

Other rural areas

5.18 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

5.19 1,125 homes will be delivered to the East of Rugeley between 2011 and 2028. These will be delivered as follows (NB there is a gap between 2021 and 2023 to allow for reclamation works):

Table 5.10 East of Rugeley SDA Housing Trajectory

Year	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Approx. completions	72	77	90	75	75	55	50

Table 5.11 East of Rugeley SDA Housing Trajectory (cont.)

Year	2018/19	2019/20	2020/21	2023/24	2024/25	2025/26	2026/27	2027/28
Approx. completions	50	50	44	50	100	100	100	100

Table 5.12 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 (2010 - 28)	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. (2010-28)	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 and CIL / S106.	Alongside occupation. (2020-28)	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 (2010 -28)	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.	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	Will vary	Developer	Alongside construction	Developer

Infrastructure Requirement East of Rugeley	Cost	Funding	Phasing	Delivery Lead
sustainable management strategy for the maintenance of these.				
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	2010 - 2028	Developer in partnership with other organisations as applicable.
Contributions to education as detailed under 'strategic infrastructure'.	See strategic infrastructure.	CIL / S106 (See strategic infrastructure).	Throughout plan period.	See 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 (2028)	Developer
Community centre to be delivered as part of the community 'hub' .	£800,000 based on cost of Darwin Park community centre.	CIL / S106	By completion.	Developer working in partnership with Lichfield District 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.	Costs will vary depending on provision and whether on or off - site. 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).	CIL / S106	Alongside development of the site, to be completed by 2028 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,	Will vary	CIL / S106	Alongside development of	Developer in partnership with

Infrastructure Requirement East of Rugeley	Cost	Funding	Phasing	Delivery Lead
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.			the site, to be completed by 2028 with an ongoing programme for maintenance.	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 CIL / S106	Alongside development of the site, to be completed by 2028 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 2028 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 CIL or S106	By 2028	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 2028 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 CIL / S106	Alongside development of the site, to be completed by 2028 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
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 CIL / S106	Alongside development of the site, to be completed by 2028 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 2028 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 CIL / S106	Alongside development of the site, to be completed by 2028 with an ongoing programme for maintenance.	Lichfield District Council with developer and in partnership with others as applicable.

North of Tamworth Broad Development Location

5.20 1,000 homes will be delivered by 2028 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.

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

5.22 In summary the requirements are:

- 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 and Amington links proposed within Tamworth Borough;
- The provision and maintenance of sustainable drainage systems and flood mitigation measures.

Appendix A Dynamic Viability Model

A.1 The District Council adopted the results of the 2009 Affordable Housing Viability Study (AHVS) and with it the updating approach built into the Dynamic Viability method.

A.2 The 2009 AHVS concludes that, at current market conditions, the highest target that could reasonably be applied was 20%. It went on to suggest that over time, as prices and costs changed, viability would alter, and it might become possible to set a higher target. A Dynamic Viability (DV) approach was proposed.

A.3 Under this approach, levels of viable target under different combinations of price, cost and land value movements were set out in a Matrix table. Movements in these three variables would then be monitored using nationally available indices. At periodic intervals, linked to the production of the District Councils Annual Monitoring Report, the latest index values would be used to establish an updated target from the Matrix, in a completely transparent procedure.

A.4 A single 'benchmark site' was selected as a guide for updating the Dynamic Viability model which was seen as typical of likely future housing development in the District.

A.5 The updating process involves three well established and published index series:

Table A.1 Indices for automatic updating of Dynamic Viability

Variable	Proposed Index	Starting Value
House Price	Halifax House Price Index	Feb 2009 = 519.1
Source	Halifax House Price Index (free, monthly series seasonally adjusted) http://www.lloydsbankinggroup.com/media1/research/halifax_hpi.asp	
Build Cost	BCIS General Building Cost Index	March 2009 = 286.3
Source	BCIS Review Online (subscription only, monthly) Produced by the Royal Institute of Chartered Surveyors (RICS) http://bcis.co.uk/online	
Alternative use value	Property Market Report (VOA) Value of Agricultural Land (Equipped Arable) for Shropshire	July 2009 = figure is £7,393 per acre/ £18,261 per ha for the old West Midlands. In January 2010 (published July 2010) the equivalent figure for Shropshire was £7,500 per acre
Source	Valuation Office Agency: Property Market Reports (free, six monthly) Http://www.voa.gov.uk/publications/property_market_report/pmr-jan-2010/index.htm	

A.6 This table provides the links to the published indexes. The resultant range of targets was set in tables such as the following. As can be seen, the 20% target is outlined in its cell, which corresponds to zero for both cost and price indices. There is, behind this, an alternative use value matrix and this table represents the base position for that alternative use value matrix as well.

Picture A.1 Superfine Matrix: base alternative use value

		Price Change HPI									
		%	-4%	-2%	0%	2%	4%	6%	8%	10%	12%
Cost Change BCIS Index	%	498.3	508.7	519.1	529.5	539.9	550.2	560.6	571.0	581.4	
	-4%	274.8	20%	20%	25%	25%	30%	30%	30%	35%	35%
	-2%	280.6	15%	20%	20%	25%	25%	25%	30%	30%	35%
	0%	286.3	10%	15%	20%	20%	25%	25%	25%	30%	30%
	2%	292.0	10%	10%	15%	15%	20%	20%	25%	25%	30%
	4%	297.8	5%	10%	10%	15%	15%	20%	20%	25%	25%
	6%	303.5	5%	5%	10%	10%	15%	15%	20%	20%	25%
	8%	309.2	0%	5%	5%	10%	10%	15%	15%	20%	20%
	10%	314.9	0%	0%	5%	5%	10%	10%	15%	15%	20%

A.7 A table of this kind can be seen to permit the target to vary as the indexes change over time. The approach has now been improved to the point where a single matrix has been developed to include all three indexes. This is done by having the variations of each alternative use value within one cell. Thus the 20% in the above table would be represented by a larger cell including all 8 of the bands of the third dimension: the alternative use value.