

Sustainability Appraisal of the Wolverhampton Local Plan

Scoping Report

December 2022



LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

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SA Scoping Report

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scope of the potential sustainability impacts of the Wolverhampton Local Plan and meets the requirements of the SEA Regulations. It is not intended to be a substitute for an Environmental Impact Assessment (EIA) or Appropriate Assessment (AA).

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Acronyms & Abbreviations

A&E	Accident and Emergency
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
AP	Assessment Point
AQMA	Air Quality Management Area
ASR	Annual Status Report
BAME	Black and Minority Ethnic
BBC	Birmingham and Black Country
BCP	Black Country Plan
BMV	Best and most versatile
BNG	Biodiversity Net Gain
BOA	Biodiversity Opportunity Area
CA	Conservation Area
CAMS	Catchment Abstraction Management Strategy
CCC	Committee on Climate Change
CROW	Countryside and Rights of Way
CWC	City of Wolverhampton Council
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
EA	Environment Agency
EU	European Union
GHG	Greenhouse gas
GI	Green Infrastructure
GIS	Geographical Information System
GP	General Practitioner
ha	Hectare
HEAD	Historic Environment Area Designation
HER	Historic Environment Record
HGV	Heavy Goods Vehicle
HLC	Historic Landscape Characterisation
HRA	Habitats Regulations Assessment
IMD	Index of Multiple Deprivation
IRZ	Impact Risk Zone
LA	Local Authority
LNR	Local Nature Reserve
LSOA	Lower Super Output Area
LTP	Local Transport Plan
LWS	Local Wildlife Site
MHCLG	Ministry of Housing, Communities and Local Government
NCA	National Character Area
NHS	National Health Service
NIA	Nature Improvement Areas
NNR	National Nature Reserve
NO ₂	Nitrogen Dioxide

NPPF	National Planning Policy Framework
NVQ	National Vocational Qualification
ONS	Office for National Statistics
OS	Ordnance Survey
PM ₁₀	Particulate Matter (10 micrometres)
PPG	Planning Practice Guidance
PPP	Policies, Plans and Programmes
PRoW	Public Rights of Way
RBMP	River Basin Management Plan
RIGS	Regionally Important Geodiversity Site
RPG	Registered Park and Garden
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SINC	Site of Importance for Nature Conservation
SLINC	Site of Local Importance for Nature Conservation
SM	Scheduled Monument
SPA	Special Protection Area
SPZ	Source Protection Zone
SSSI	Sites of Special Scientific Interest
SuDS	Sustainable Drainage System
UNFCCC	United Nations Framework Convention on Climate Change
WCS	Water Cycle Study
WLP	Wolverhampton Local Plan
WRMP	Water Resources Management Plan

1 Introduction

1.1 This report

1.1.1 City of Wolverhampton Council (CWC) have commissioned Lepus Consulting to carry out a Sustainability Appraisal (SA), to support the preparation of the Wolverhampton Local Plan (WLP). The purpose of Sustainability Appraisal is to assess the extent to which a plan or programme will help to achieve environmental, economic and social sustainability.

1.1.2 This Scoping Report has been prepared as the first stage of the SA process in order to inform the Sustainability Appraisal of the WLP. This report has been subject to consultation with the statutory consultation bodies (Natural England, Historic England, and the Environment Agency) as required by Regulation 12 (5) of The Environmental Assessment of Plans and Programmes Regulations 2004¹ (SEA Regulations), with comments received taken into account in the Regulation 18 SA.

1.2 The WLP area

1.2.1 The Wolverhampton City administrative area comprises roughly 6943.6ha, with a population of approximately 264,407 people according to the Office for National Statistics (ONS) population for mid-2020². **Figure 1.1** shows the administrative boundary of Wolverhampton, which comprises the plan area for the WLP.

1.2.2 Wolverhampton City lies within the Black Country, which is a predominantly urban sub-region of the West Midlands. The sub-region includes the boroughs of Dudley, Sandwell, Walsall and the City of Wolverhampton.

1.2.3 Wolverhampton is highly urbanised with some small extents of Green Belt land mainly to the north and west, and alongside the Smestow Brook and the Staffordshire and Worcestershire Canal. Although the city contains no major rivers, it does support several watercourses including the River Penk and River Tame which form tributaries of the River Trent, as well as Smestow Brook which is a tributary of the River Stour.

1.2.4 Wolverhampton City Centre is the key strategic centre of Wolverhampton, although the administrative area also contains two town centres of Bilston and Wednesfield, in addition to several local centres.

¹ Environmental Assessment of Plans and Programmes Regulations (2004). Available at:
<http://www.legislation.gov.uk/ukxi/2004/1633/contents/made> [Date accessed: 24/10/22]

² ONS (2021) Estimates of the population for the UK. Available at:
<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland> [Date accessed: 31/10/22]

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- 1.2.5 The area has a rich industrial heritage, including its extensive canal network, which opened up the mineral wealth of the area for exploitation during the Industrial Revolution. The Black Country area owes its name to black smoke, particularly from iron and coal industries, during a time when the Black Country became one of the most heavily industrialised areas in Britain.
- 1.2.6 Mining ceased in the area in the late 1960s, but manufacturing continues today, although on a much smaller scale. There is a total of 446,000 employee jobs across the Black Country as a whole³. In addition to manufacturing, which equate to approximately 13% of employee jobs in the Black Country, the biggest employment sectors include wholesale and retail trade (19.3%) and human health and social work activities (16.4%)⁴.
- 1.2.7 Wolverhampton itself was originally a market town, historically forming part of Staffordshire, but later became a major centre for the Industrial Revolution⁵. Today, Wolverhampton still provides a wide range of employment, leisure, retail and tourism opportunities to serve the Black Country and the wider area. Engineering remains an important aspect of Wolverhampton's economy.
- 1.2.8 Although there are challenges within Wolverhampton, and the other Black Country Authorities, in terms of unemployment and lower earnings compared to other parts of the country, the plan area also supports several further and higher educational facilities. This includes the University of Wolverhampton and the City of Wolverhampton College.

³ Nomis (2020) Labour Market Profile – Black Country. Available at:
<https://www.nomisweb.co.uk/reports/lmp/lep/1925185537/report.aspx> [Date accessed: 31/10/22]

⁴ Ibid

⁵ Wolverhampton City Guide. Available at: <http://www.wolverhamptoncity.co.uk/> [Date accessed: 31/10/22]

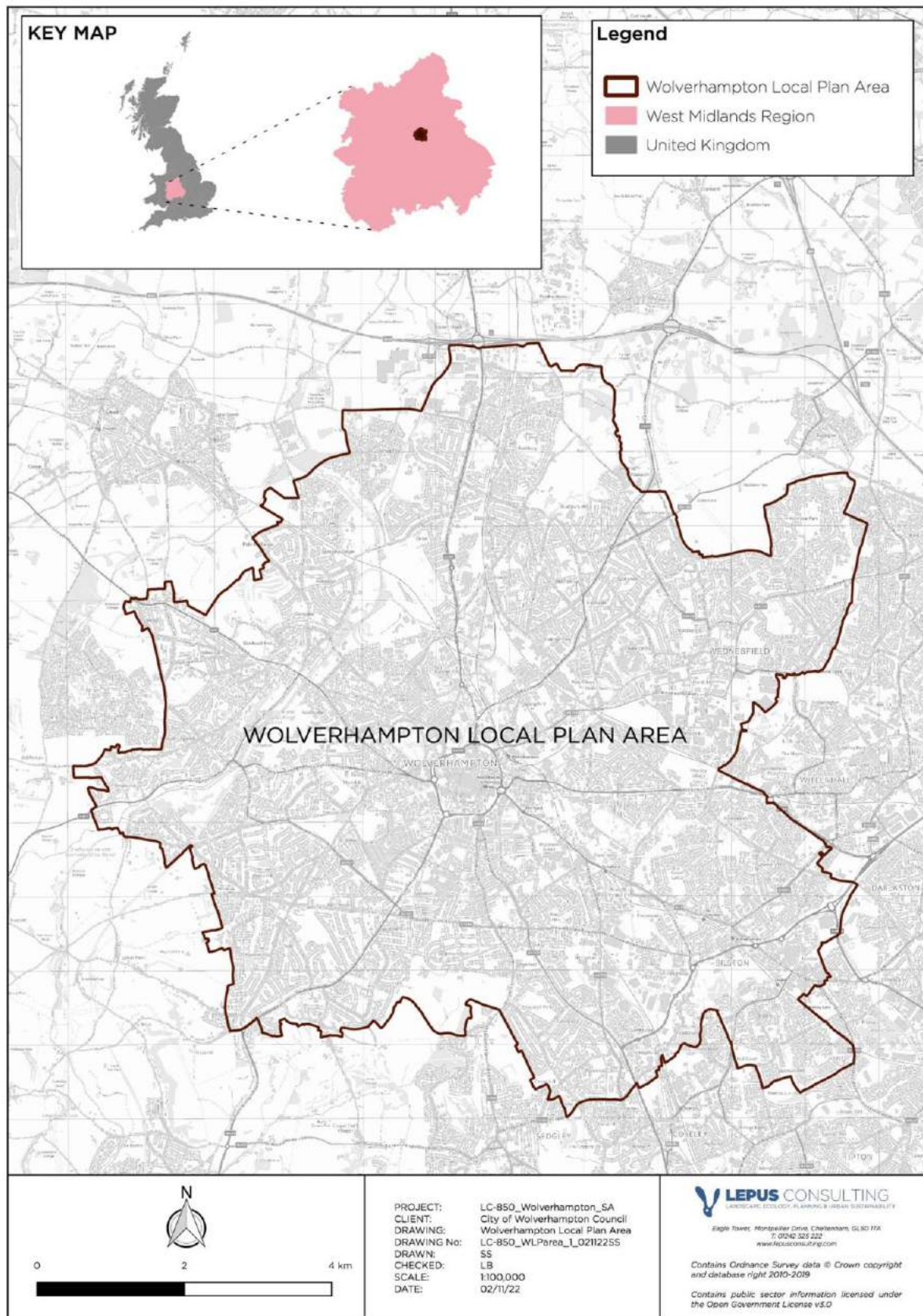


Figure 1.1: The Wolverhampton Plan area

1.3 The Wolverhampton Local Plan

- 1.3.1 The WLP will provide a vision, strategic goals and priorities, as well as a delivery-related spatial and policy framework. This framework will define precise guidelines for growth and change while directing and shaping development throughout Wolverhampton. Planning decisions in Wolverhampton will be aided by the policies, and once implemented, the WLP will offer a plan for bringing land forward that seeks to support sustainable growth. Residents, businesses, and developers will have certainty and transparency about how the City is expected to grow up to 2040.
- 1.3.2 The WLP is being prepared by CWC, following the ending of work on the Black Country Plan (BCP) in autumn 2022. The WLP will carry forward relevant information and evidence prepared as part of the Draft BCP, with specific changes in response to planning issues raised during consultation and new evidence and information for the City of Wolverhampton.
- 1.3.3 Key facts relating to the WLP are presented in **Table 1.1**.

Table 1.1: Key facts relating to the Wolverhampton Local Plan

Responsible authority	City of Wolverhampton Council
Title of plan	Wolverhampton Local Plan
What prompted the plan (e.g. legislative, regulatory or administrative provision)	The WLP is being developed in accordance with the requirements of the Planning and Compulsory Purchase Act 2004 and The Town and Country Planning (Local Development) (England) Regulations 2012.
Area covered by the plan	City of Wolverhampton (see Figure 1.1).
Purpose and/or objectives of the plan	<p>The Local Plan will set out the spatial planning strategy for the local authorities, having due regard to other strategies and programmes that form the development framework.</p> <p>The Local Plan strategy will include an overall strategy for how and where development should take place, locations of new homes, services and employment sites and how communities can meet their needs for housing and development. The Local Plan will form the main guide towards future development in the city.</p>

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1.4 Sustainability Appraisal and Strategic Environmental Assessment

- 1.4.1 This document constitutes the SA Scoping Report for the WLP. This represents Stage A of SA process, according to the Planning Practice Guidance (2016) Guidance on Sustainability Appraisal⁶ (see **Figure 1.2**).
- 1.4.2 SA is the process of informing local development plans to maximise their sustainability value. SA is a statutory requirement for development plan documents, the key objective of which is to promote sustainable development.
- 1.4.3 The requirements to carry out SA and SEA are distinct, although it is possible to satisfy both obligations using a single appraisal process.
- 1.4.4 The European Union Directive 2001/42/EC⁷ (SEA Directive) applies to a wide range of public plans and programmes on land use, energy, waste, agriculture, transport etc. (see Article 3(2) of the Directive for other plan or programme types). The Strategic Environmental Assessment (SEA) procedure can be summarised as the preparation of an environmental report in which the likely significant effects on the environment and the reasonable alternatives of the proposed plan or programme are identified. The public and the relevant environmental authorities are informed and consulted on the draft plan or programme and the environmental report prepared.
- 1.4.5 The Directive has been transposed into English law by the SEA Regulations (SI no. 1633). Under the requirements of the SEA Directive and SEA Regulations, specific types of plans that set the framework for the future development consent of projects must be subject to an environmental assessment. Therefore, it is a legal requirement for the WLP to be subject to SEA throughout its preparation.

⁶ Ministry of Housing, Communities and Local Government (2021) Planning practice guidance. Available at: <https://www.gov.uk/government/collections/planning-practice-guidance> [Date accessed: 24/10/22]

⁷ European Commission (2018) SEA. Available at: <https://ec.europa.eu/environment/eia/sea-legalcontext.htm> [Date accessed: 24/10/22]

1.4.6 SA is a UK-specific procedure used to appraise the impacts and effects of development plans in the UK. It is required by S19(5) of the Planning and Compulsory Purchase Act 2004⁸ and should be an appraisal of the economic, social and environmental sustainability of development plans. The procedural requirement for SA resides in The Town and Country Planning (Local Planning) (England) Regulations 2012⁹. SEA is a systematic process for evaluating the environmental consequences of proposed plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision-making.

1.5 Best Practice Guidance

1.5.1 Government policy recommends that both SA and SEA are undertaken under a single process, which incorporates the requirements of the SEA Regulations. This is to be achieved through integrating the requirements of SEA into the SA process. The approach for carrying out an integrated SA and SEA is based on best practice guidance:

- European Commission (2004) Implementation of Directive 2001/42 on the assessment of the effects of certain plan and programmes on the environment¹⁰
- Office of Deputy Prime Minister (2005) A Practical Guide to the SEA Directive¹¹
- Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework (NPPF)¹²
- Ministry of Housing, Communities and Local Government (2021) Planning Practice Guidance (PPG)¹³
- Royal Town Planning Institute (2018) Strategic Environmental Assessment, Improving the effectiveness and efficiency of SEA/SA for land use plans¹⁴

⁸ Planning and Compulsory Purchase Act (2004). Available at: <https://www.legislation.gov.uk/ukpga/2004/5/contents> [Date accessed: 24/10/22]

⁹ Town and Country Planning (Local Planning) (England) Regulations (2012). Available at: <http://www.legislation.gov.uk/uksi/2012/767/contents/made> [Date accessed: 25/04/22]

¹⁰ European Commission (2004) Implementation of Directive 2001/42 on the assessment of the effects of certain plan and programmes on the environment. Available at: http://ec.europa.eu/environment/archives/eia/pdf/030923_sea_guidance.pdf [Date accessed: 25/10/22]

¹¹ Office of Deputy Prime Minister (2005) A Practical Guide to the SEA Directive. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguides_ea.pdf [Date accessed: 25/10/22]

¹² Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework-2> [Date accessed: 25/10/22]

¹³ Ministry of Housing, Communities and Local Government (2021) Planning practice guidance. Available at: <https://www.gov.uk/government/collections/planning-practice-guidance> [Date accessed: 25/10/22]

¹⁴ Royal Town Planning Institute (2018) Strategic Environmental Assessment, Improving the effectiveness and efficiency of SEA/SA for land use plans. Available at: <https://www.rtpi.org.uk/media/1822/sea-sappracticeadvicefull2018c.pdf> [Date accessed: 25/10/22]

1.6 SEA Regulations Requirements

1.6.1 This Scoping Report represents Stage A of the SA process (see **Figure 1.2**), and presents information in relation to:

- Identifying other relevant plans, programmes and environmental protection objectives
- Collecting baseline information
- Identifying sustainability problems and key issues
- Preparing the SA Framework
- Consultation arrangements on the scope of SA with the consultation bodies

1.6.2 Schedule 2 of the SEA Regulations states the various topics that should be considered in the SEA appraisal process, including:

- Biodiversity, flora and fauna
- Population
- Human health
- Soil
- Water
- Air
- Climatic factors
- Material assets
- Cultural heritage (including architectural and archaeological heritage)
- Landscape
- The inter-relationship between these factors

1.6.3 The policy, plan and programme (PPP) review, the baseline data and the other relevant sustainability issues are largely structured in accordance with the topics of Schedule 2 of the SEA Regulations, the details of which are presented in **Table 1.2**.

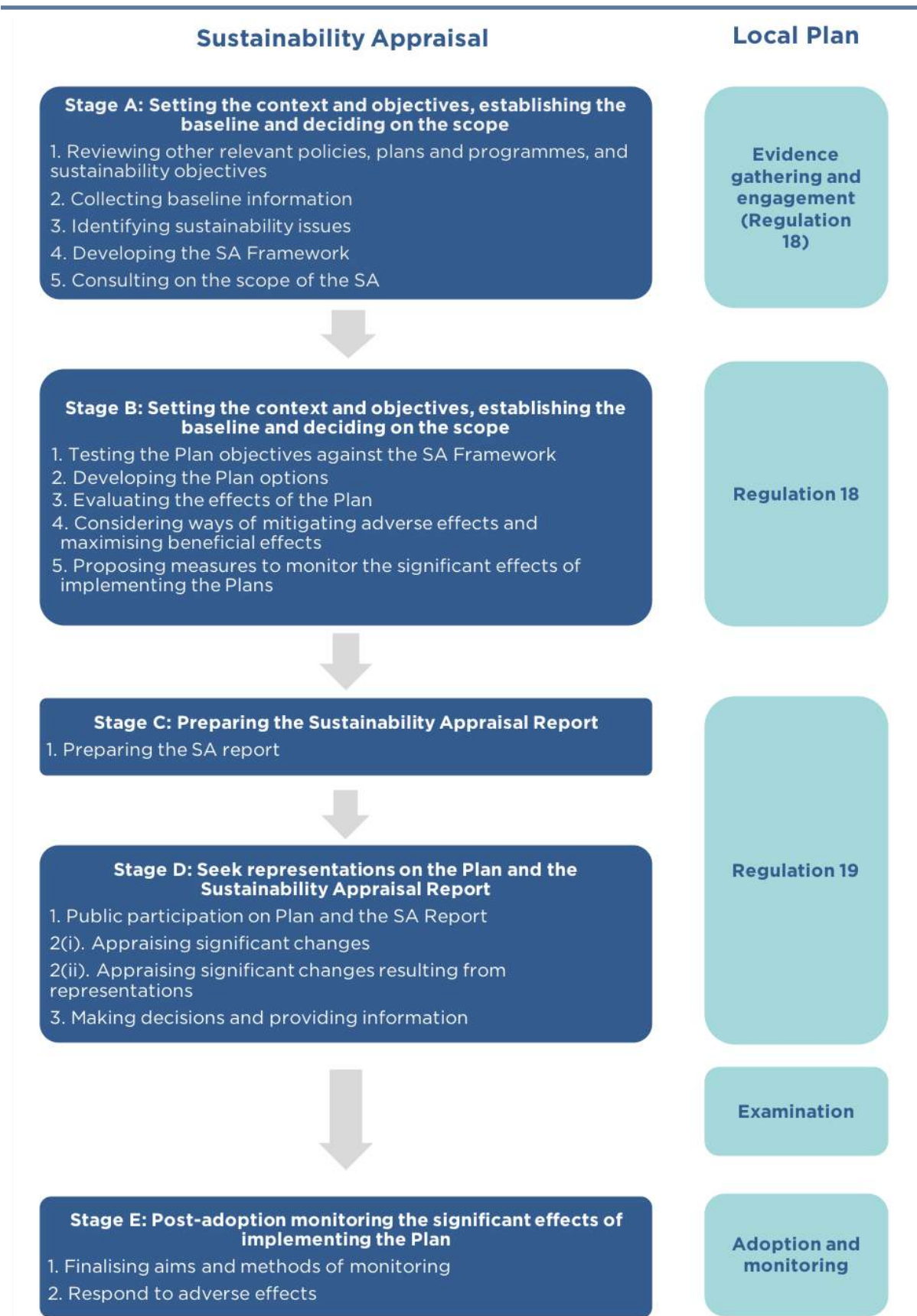


Figure 1.2: Sustainability Appraisal process.

Table 1.2: Sustainability themes

Sustainability theme	SEA topic included in Schedule 2 of SEA Regulations	What is included in the sustainability theme? (not exhaustive)
Accessibility and transport	Population	Transportation infrastructure; Traffic flows; Walking and cycling; Accessibility.
Air quality	Air	Air pollution sources; Air quality hotspots; Air quality management.
Biodiversity, flora, fauna and geodiversity	Biodiversity, flora and fauna	Habitats; Species; Nature conservation designations; Landscape features; Geological features.
Climatic factors	Climatic factors	Greenhouse gas emissions by source; Greenhouse gas emissions trends; Effects of climate change; Climate change adaptation; Flooding.
Human health	Human health	Health indicators; Healthcare inequalities; Sport, fitness and activity levels.
Cultural heritage	Cultural heritage	Historic development of the town; Designated and non-designated sites and areas; Setting of cultural heritage assets; Historic landscape character assessment; Archaeological assets.
Landscape and townscape	Landscape	Landscape designations; Visual amenity; Landscape/townscape character; Tranquility.
Population and material assets	Population and material assets	Renewable energy; Waste and recycling rates; Minerals; Employment and earnings; Skills, education and unemployment; House prices and affordability; Housing quality and vacancy rates; Population size and density; Age structure; Indices of Multiple Deprivation; Unemployment; Crime; Recreation and amenity.
Water and Soil	Water and soil	Soils; Watercourses; Water resources; Water quality; Contaminated land.

1.7 Policy, Plan and Programme review

- 1.7.1 The WLP may be influenced in various ways by other policies, plans or programmes (PPPs), or by external sustainability objectives such as those put forward in higher strategies or by legislation. The SA/SEA process will consider of potential synergies between these PPPs and address any inconsistencies and constraints.
- 1.7.2 A short introduction to each theme, based on the PPP review, is presented in **Chapters 2 - 10**. The full PPP Review is included in **Appendix A**.

1.8 Baseline data collection

- 1.8.1 **Chapters 2 - 10** review the current environmental, social and economic conditions relevant to the WLP. The purpose of the baseline review is to help define the key sustainability issues for the WLP. The baseline data should be indicative of local circumstances, be up to date and be fit for purpose.
- 1.8.2 One of the purposes of consultation on the Scoping Report is to seek views on whether the selected data is appropriate. The baseline has been constructed utilising a wide range of data sources, with GIS (Geographic Information Systems) data used where available. The data has been presented through tables, text and GIS mapping, and all data sources have been referenced as appropriate.
- 1.8.3 Where data is available at a local scale it has been used to inform the scoping process. If local data is not available, regional information has been used. Where this is the case, it is clearly stated.
- 1.8.4 Within **Chapters 2 – 10**, a summary of the key sustainability issues that have been identified relating to each sustainability theme has also been provided.

1.9 Structure of the Scoping Report

1.9.1 This chapter has provided background information to the WLP and the accompanying SA. The remainder of the report is structured as follows:

- **Chapter 2** – Accessibility and transport
- **Chapter 3** – Air Quality
- **Chapter 4** – Biodiversity, flora, fauna and geodiversity
- **Chapter 5** – Climatic factors
- **Chapter 6** – Cultural heritage
- **Chapter 7** – Human health
- **Chapter 8** – Landscape and townscape
- **Chapter 9** – Population and material assets
- **Chapter 10** – Water and soil resources
- **Chapter 11** – A summary of the likely evolution of the baseline in the absence of the WLP
- **Chapter 12** – Outlines the purpose of the SA Framework and SA Objectives
- **Chapter 13** – Outlines the next steps for the WLP and SA process
- **Appendix A** – Review of relevant PPPs
- **Appendix B** – SA Framework

2 Accessibility and Transport

2.1 Introduction

- 2.1.1 Key challenges faced regarding accessibility and transport include the need to modernise transport infrastructure and make transport more sustainable. European and UK transport PPPs include methods to reduce pollution and congestion, such as by improving access to affordable and frequent sustainable transport modes and improving the local footpath and cycle path networks. The PPPs regularly promote the need for a transport network which is sustainable but also supports economic growth. The introduction of car free zones, walkable neighbourhoods, and the development of new technologies such as electric vehicle charging points should form fundamental aspects of sustainable transport going forward.
- 2.1.2 The transport theme is relevant to a variety of other sustainability themes. For example, improving sustainable transport accessibility and usage would be likely to lead to a reduction in greenhouse gas (GHG) emissions, which would contribute towards climate change mitigation efforts. If residents are encouraged to cycle or walk, they will be likely to realise health benefits. A reduction in congestion would also be likely to provide an economic boost to the local area, whilst improved air quality would benefit human health, as well as habitats or wildlife sites which are sensitive to air pollutants such as atmospheric nitrogen.
- 2.1.3 The PPPs highlight that congestion on roads, railways and airports continues to be a key challenge for the West Midlands⁵. Local plans therefore focus on meeting transport needs more effectively through improved access to jobs and services, particularly for those most in need, in ways which are sustainable. This includes improved public transport, reduced problems of congestion, pollution and safety.
- 2.1.4 In 2006 the Department for Transport produced the 'Transport's Role in Sustaining the UK's Productivity and Competitiveness¹⁵' report. This document encouraged local transport authorities to develop a robust evidence base when planning transport.

¹⁵ Eddington Transport Study (2006) Transport's Role in Sustaining the UK's Productivity and Competitiveness¹⁵. Available at: <http://webarchive.nationalarchives.gov.uk/20090115123436/http://www.dft.gov.uk/162259/187604/206711/volume1.pdf> [Date accessed: 25/10/22]

- 2.1.5 The UK's 'Road to Zero Strategy'¹⁶ outlines how it will support the transition to zero-emission road transport. This includes measures to reduce emissions from vehicles including specific targets for Heavy Goods Vehicles (HGVs), promoting low- and zero-emission cars and developing high quality electric vehicle infrastructure networks. The RTPi's 'Net Zero Transport: The role of spatial planning and place-based solutions'¹⁷ further explores how different places could achieve an 80% decrease in surface transport emissions by 2030.
- 2.1.6 Local plans should focus on appropriate design, location and layout of development, increasing investment in infrastructure, improving the quality, equality and accessibility of public transport, supporting walking and cycling, enhancing road safety and reducing the amount of emissions produced by transportation.
- 2.1.7 The 'Movement for Growth: 2026 Delivery Plan for Transport'¹⁸ highlights the need for the transport network to support sustainable growth in the West Midlands, the competitiveness of the economy, and to help sustain the high quality of life of local residents. These issues need to be addressed whilst responding to climate change issues.

2.2 Baseline data

Road Network

- 2.2.1 The transport network in the City of Wolverhampton is very well connected to the rest of the UK and provides a reasonably good level of service. The city centre is the key strategic centre of Wolverhampton and there are also two town centres (Bilston and Wednesfield) and numerous local centres. **Figure 2.1** shows the M54 motorway is located to the north. The primary non-motorway routes within the WLP area include the A41, A460, A454, A449 and A4123, providing links between the major settlements. A significant network of B-roads and other minor roads link these roads together and connect to other lower order settlements throughout the area.

¹⁶ HM Government (2018) The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy. Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739460/road-to-zero.pdf [Date accessed: 25/10/22]

¹⁷ RTPi (2021) Net Zero Transport: The role of spatial planning and place-based solutions. Available at:
<https://www.rtpi.org.uk/media/9233/rtpi-net-zero-transport-january-2021.pdf> [Date accessed: 25/10/22]

¹⁸ MOVEMENT FOR GROWTH: 2026 Delivery Plan for Transport. Available at:
<https://governance.wmca.org.uk/documents/s674/Draft%202026%20Delivery%20Plan%20for%20Transport.pdf> [Date accessed: 25/10/22]

2.2.2 The denseness of the urban area and the number of centres create particularly complex movement patterns and have led to a complicated transport network. Buses are the most important method of public transport travel, but they are affected by congestion, in addition to those who use private transportation. Most significantly, unpredictable or delayed travel times have an effect on the logistics and freight industry by adding unanticipated travel time¹⁹.

2.2.3 The West Midlands Local Transport Plan 2011-2026 sets out clear objectives for dealing with transport issues, problems and challenges within the Black Country. It is not a stand-alone strategy but instead draws on a number of national, regional and local planning and transportation policy documents to ensure that the strategy guides the delivery of wider objectives.

Electric vehicles

2.2.4 Electric and hybrid vehicles are growing rapidly in popularity in the UK. In 2014, around 500 electric cars were registered per month in the UK. By May 2020, more than 119,600 electric cars and 301,000 plug-in hybrids were on UK roads²⁰. In 2020, electric cars constituted 12% of new car registrations in the UK, which is up from 2.9% in January 2018. The sale of diesel cars will be banned in the UK by 2040. Road transport associated air pollution may therefore be expected to decrease over time.

Rail network

2.2.5 There is good access to the rail network within the City of Wolverhampton (see **Figure 2.1**). The rail network in the wider Black Country area includes four passenger rail lines¹² and the Midland Metro light rail system that operates between Birmingham and Wolverhampton. This service takes approximately 40 minutes from Wolverhampton St Georges to Birmingham Grand Central¹³.

Airports

2.2.6 There are no commercial airports within the City of Wolverhampton, with the nearest being Birmingham Airport, located in the borough of Solihull approximately 10 miles to the east of the Black Country, which offers a broad range of package holidays, national and international flights²¹. This makes the West Midlands area an attractive place to live for frequent travellers and a place to stay for those travelling to and from Birmingham Airport.

¹⁹ Congestion Management Plan by Transport for West Midlands. Available at:

https://www.tfwm.org.uk/media/oxfyfpvz/tfwm_cm-plan-aw_v3_lr_spreads.pdf [Date accessed: 25/10/22]

²⁰ Nextgreencar (2017) Electric car market statistics. Available at: <http://www.nextgreencar.com/electric-cars/statistics/> [Date accessed: 25/10/22]

²¹ Birmingham Airport (2022). Available at: <https://www.birminghamairport.co.uk/> [Date accessed: 25/10/22]

Public rights of way and Cycling Network

2.2.7 Public Rights of Way (PRoW) are paths within England and Wales on which the public have a legally protected right to access. Within the WLP area, there are a few but fragmented PRoW network including paths along the canal system (see **Figure 2.2**).

2.2.8 Across the West Midlands, there are over 193km of cycle and walking routes²². Ongoing development and upgrades to the cycling and walking network seek to connect communities and promote active travel as a healthy and sustainable mode of transport.

2.2.9 The City of Wolverhampton has a generally well-connected network of cycle routes. The Strategic Cycle Network connects the WLP area with Birmingham and the rest of the Black Country.

Public transport and commuting

2.2.10 The Black Country is served by regular public transport links. Bus service providers within the four local authorities include National Express West Midlands, Arriva, First Bus and Diamond Bus¹⁵. Key bus routes are shown on **Figure 2.1**.

2.2.11 **Table 2.1** illustrates the method of travel to work of residents in the City of Wolverhampton. The number of people working at or from home has gone up significantly due to the Covid-19 pandemic. The table also indicates that the majority of all usual residents aged 16 to 74 drive to work in a car or van.

Table 2.1: Method of travel to work (all usual residents aged 16 to 74)²³

Mode of transport	2011 (%)	2020 (%)
Mainly work at or from home	2.98	6.77
Train, underground, metro, light rail, tram	1.75	2.37
Bus; minibus or coach	4.79	10.50
Driving a car or van	35.26	62.12
Passenger in car or van	3.83	5.98
Bicycle	1.23	1.99
On foot	5.82	8.69

²² Transport for West Midlands (2019) Cycling and Walking Network. Available at: <https://www.tfwm.org.uk/plan-your-journey/ways-to-travel/cycling-in-the-west-midlands/> [Date accessed: 09/04/20]

²³ ONS (2020) Method of Travel to Work. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/methodoftraveltowork> [Date accessed: 26/10/22]

2.3 Key Issues

- The City of Wolverhampton is well serviced by a range of transport modes.
- Growth in travel and car use is likely to increase pressure on the road network within the WLP. Road junctions, especially along the motorway network, suffer with congestion issues.
- Reliance on personal car use is high.
- New development in Wolverhampton and the wider Black Country has the potential to impact on the transport infrastructure.
- There is a limited number of Public Rights of Way (PRoW) within the WLP area.

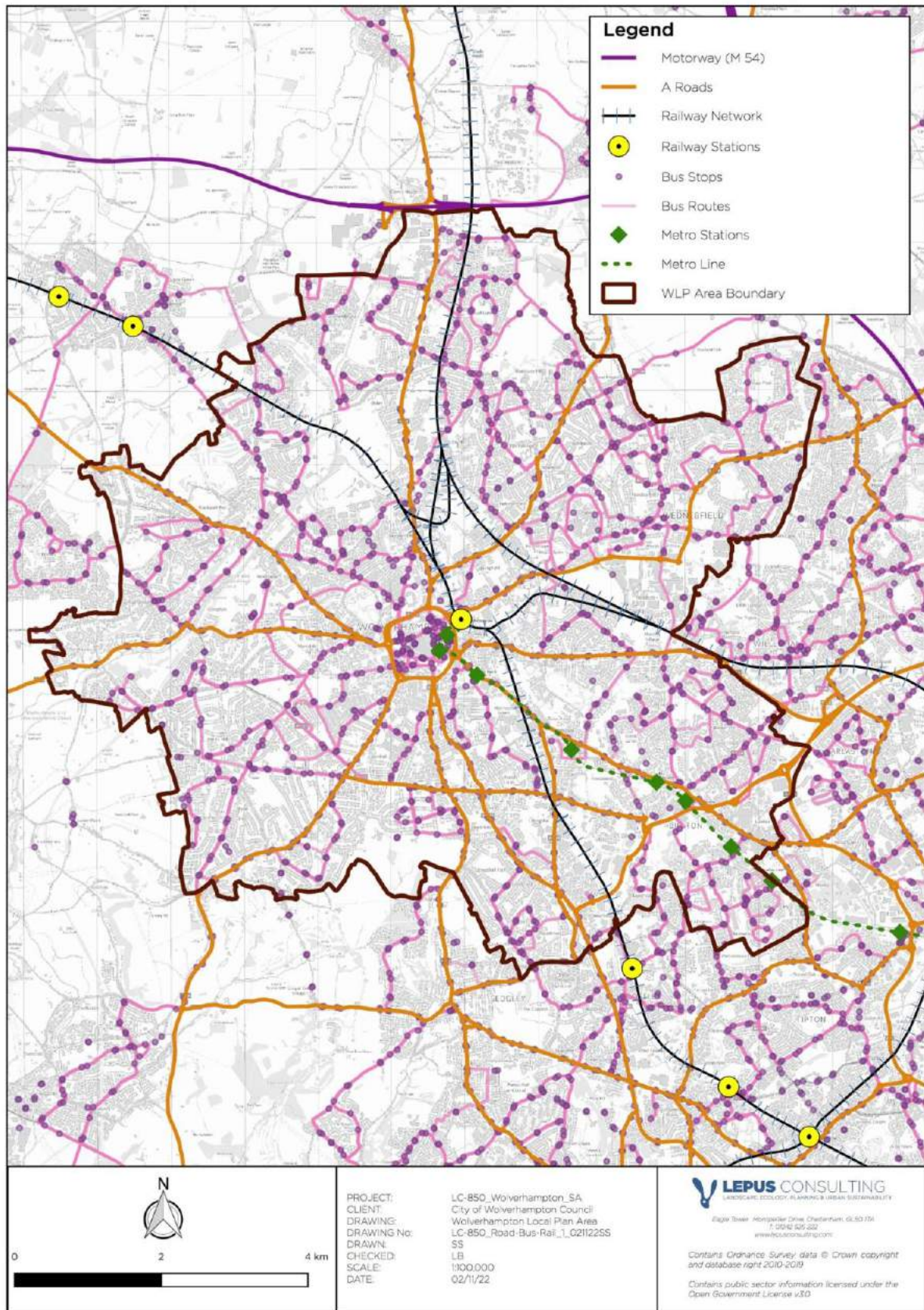


Figure 2.1: Transportation networks in and around the WLP area

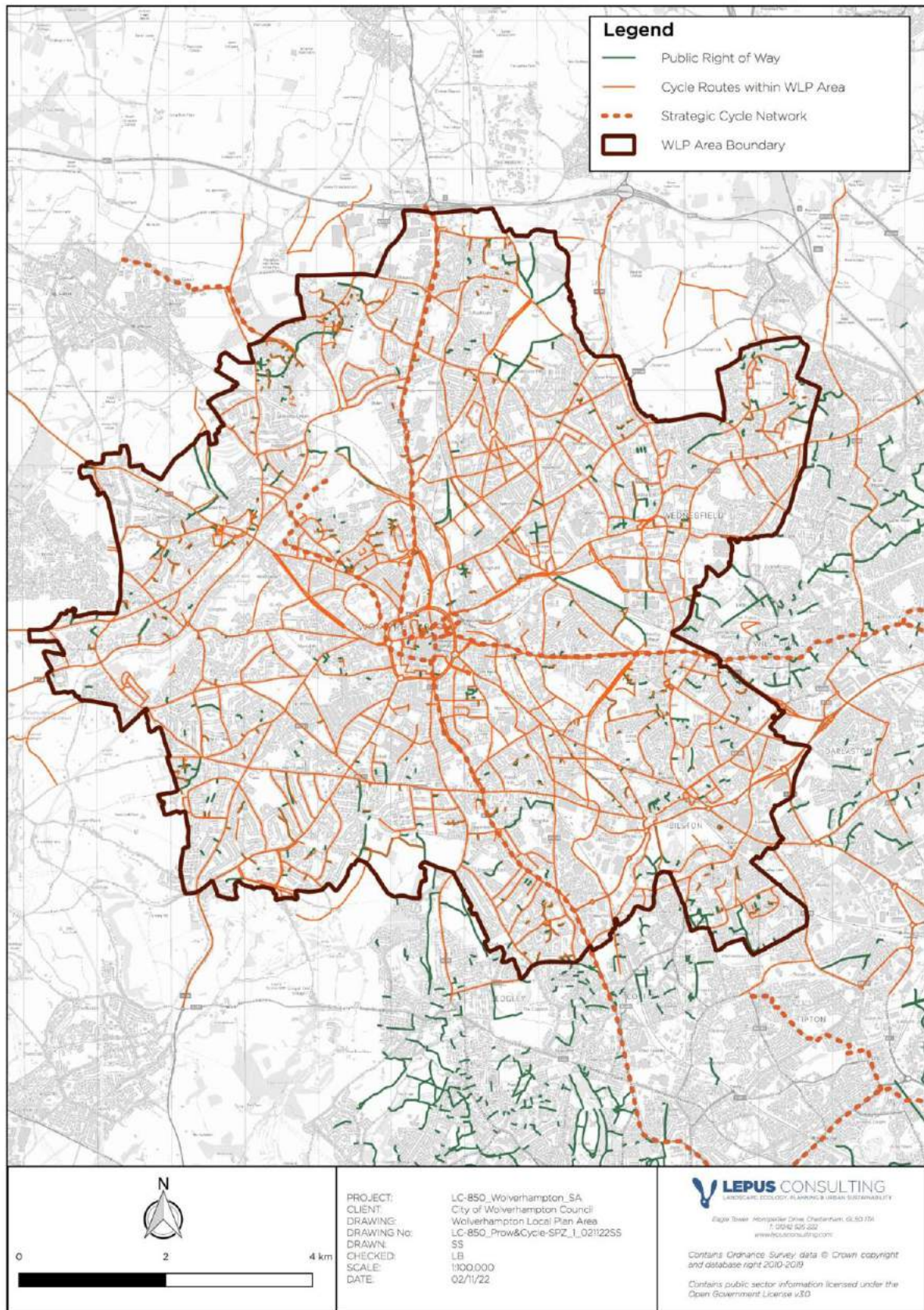


Figure 2.2: Public Rights of Way and cycle routes in the WLP area

3 Air Quality

3.1 Introduction

- 3.1.1 Poor air quality is among the largest environmental risks to public health in the UK. Several objectives have been established in relation to air quality at both the European and the UK level (emanating from the 1996 EC Directive²⁴). This includes the setting of targets for reducing emissions of specific pollutants to minimise negative impacts on health and the environment.
- 3.1.2 The Environment Act (1995) requires all local authorities to review and assess the air quality in their area. In areas where the air quality objectives are not anticipated to be met, councils are required to establish Air Quality Management Areas (AQMAs).
- 3.1.3 In July 2017, the UK Government published a new plan²⁵ to tackle the issue of air pollution throughout the country. This plan focuses on meeting the legal requirements for reducing nitrogen dioxide set out in the Air Quality Standards Regulations 2010²⁶.
- 3.1.4 The Clean Air Strategy²⁷ published in 2019 illustrates how the government will tackle all sources of air pollution, making air healthier to breathe, protecting nature and boosting the economy. The strategy includes targets such as a commitment to reduce PM_{2.5} concentrations across the UK, so that the number of people living in locations above the World Health Organisation's guideline level of 10µg/m³ is reduced by 50% by 2025.

²⁴ EU Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31996L0062&from=EN> [Date accessed: 25/10/22]

²⁵ Department for Environment, Farming and Rural Affairs and Department for Transport (2018) Air quality plan for nitrogen dioxide (NO₂) in UK. Available at: <https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017> [Date accessed: 25/10/22]

²⁶ Air Quality Standards Regulations 2010. Available at: <https://www.legislation.gov.uk/ukSI/2010/1001/contents/made> [Date accessed: 25/10/22]

²⁷ Department for Environment, Farming and Rural Affairs (2019) Clean Air Strategy. Available at: <https://www.gov.uk/government/publications/clean-air-strategy-2019/clean-air-strategy-2019-executive-summary> [Date accessed: 25/10/22]

3.2 Baseline data

- 3.2.1 There is one designated AQMA covering the entire WLP area; 'Wolverhampton AQMA'. This AQMA was declared in 2005, due to exceedances in the national annual mean objectives for NO₂ and PM₁₀²⁸. The principal pollutant affecting air quality in Wolverhampton is nitrogen dioxide (NO₂), mostly sourced from road traffic²⁹. The adjacent authorities of Dudley, Walsall and Sandwell are also wholly designated as AQMAs.
- 3.2.2 As all the proposed development is located within an AQMA, this is likely to lead to adverse impacts on health and may prevent the Council from achieving air quality targets. It is assumed that new development proposals within the Black Country would also result in an increase in traffic and thus could potentially increase traffic-related air pollution. Both existing and future residents would be exposed to this change in air quality.
- 3.2.3 The Black Country Air Quality Supplementary Planning Document (SPD)³⁰ outlines the context and importance of air quality in the Black Country and sets out methods for identifying, calculating and mitigating air quality issues associated with development proposals.
- 3.2.4 Specific objectives for each AQMA in the Black Country have also been stated. These are specific to the area, such as improvements to specific junctions, introducing one-way traffic flows along certain road stretches and re-allocating road space to prioritise and facilitate movement of pedestrians, cyclists, public transport users and car share users. Air quality is also continuously monitored at various points throughout the county in line with national requirements and guidelines.

²⁸ DEFRA UK Air Information Resource: Wolverhampton City Council. Available at: https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=319 [Date accessed: 01/11/22]

²⁹ Wolverhampton City Council (2012) Air Quality Updating and Screening Assessment for: Wolverhampton City Council. In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management. Available at: <http://www.wolverhampton.gov.uk/CHttpHandler.ashx?id=2326&p=0> [Date accessed: 26/10/22]

³⁰ Black Country Authorities (2016) Black Country Air Quality Supplementary Planning Document (SPD) September 2016. Available at: <https://www.dudley.gov.uk/residents/planning/planning-policy/dudley-local-plan/black-country-air-quality-spd/> [Date accessed: 26/10/22]

- 3.2.5 It is widely accepted that the effects of air pollution from road transport decreases with distance from the source of pollution. The Department for Transport (DfT) in their Transport Analysis Guidance consider that, *"beyond 200m from the link centre, the contribution of vehicle emissions to local pollution levels is not significant"*³¹. This statement is supported by Highways England and Natural England based on evidence presented in a number of research papers^{32 33}. Exposure to road transport associated emissions may have long term health impacts.
- 3.2.6 Air pollution, particularly excessive nitrogen deposition, is known to be harmful to the health and functioning of natural habitats.

3.3 Key Issues

- Wolverhampton AQMA covers the whole local authority area and the principal pollutant affecting air quality is nitrogen dioxide (NO₂), mostly sourced from road traffic.
- New housing, employment development areas, commercial and domestic sources, transport, and increasing visitor numbers in the area have the potential to lead to adverse impacts on air quality.
- Atmospheric pollutants are expected to increase as a result of increasing traffic congestion issues.

³¹ Department for Transport (2019) TAG unit A3 Environmental Impact Appraisal. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/825064/tag-unit-a3-environmental-impact-appraisal.pdf [Date accessed: 20/04/22]

³² Bignal, K., Ashmore, M & Power, S. (2004) The ecological effects of diffuse air pollution from road transport. English Nature Research Report No. 580, Peterborough.

³³ Ricardo-AEA (2016) The ecological effects of air pollution from road transport: an updated review. Natural England Commissioned Report No. 199.

4 Biodiversity, flora and fauna, and geodiversity

4.1 Introduction

- 4.1.1 The conservation of biological and geological diversity (including a reversal of the current trend of biodiversity loss) and the protection and monitoring of endangered and vulnerable species and habitats is of great importance. National and European policies identify a hierarchy of designations which aim to promote the protection and enhancement of the natural environment.
- 4.1.2 The highest priority is afforded to internationally designated habitats and species (Natura 2000) which are the subject of a specific Habitats Regulations Assessment (HRA) regime to examine the potential impacts on site or species integrity arising from policies or programmes. Other notable designations include national sites such as Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs), as well as Local Nature Reserves (LNRs) being identified locally. The integration of biodiversity considerations into all environmental and socio-economic planning is strongly advocated.
- 4.1.3 The Natural Environment White Paper³⁴ focuses on promoting high quality natural environments, expanding multi-functional green infrastructure (GI) networks and initiating landscape-scale action to support ecological networks. The White Paper specifically seeks to: protect core areas of high nature conservation value; promote corridors and 'stepping-stones' to enable species to move between key areas; and initiate Nature Improvement Areas (NIAs), where ecological functions and wildlife can be restored. This is supported by the Biodiversity Strategy for England³⁵ which aims to halt overall biodiversity loss, support healthy, well-functioning ecosystems and establish coherent ecological networks with more and better places for nature for the benefit of wildlife and people.
- 4.1.4 The NPPF includes guidance on promoting the conservation and enhancement of the natural environment. It requires the planning system to contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the government's commitment to halt the overall decline in biodiversity and establish coherent ecological networks that are more resilient to current and future pressures.

³⁴ HM Government (2011) The Natural Choice: securing the value of nature. Available at: <https://www.gov.uk/government/publications/the-natural-choice-securing-the-value-of-nature> [Date accessed: 26/10/22]

³⁵ Department for Environment, Food & Rural Affairs (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services. Available at: <https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services> [Date accessed: 26/10/22]

- 4.1.5 The Environment Act³⁶ became an Act of Parliament in 2021. The Act introduced targets, plans and policies for improving the natural environment. An important aspect of the Environment Act is the focus on biodiversity net gain (BNG), and the incorporation of the Biodiversity Metric 3.0³⁷ (or its successor) into law to ensure all new development delivers 10% net gain in biodiversity. Mandatory BNG will come into force for Town and Country Planning Act developments in November 2023³⁸.
- 4.1.6 Launched in January 2018, the 25 Year Environment Plan³⁹ sets out how we will improve the environment over a generation by creating richer habitats for wildlife, improving air and water quality and curbing plastic pollution in the world's oceans.
- 4.1.7 Local-level action plans for biodiversity and GI strategies should reflect these ecosystem-wide approaches and complement this with local priorities and goals to ensure that the Plan area's wildlife, ecology, geology and ecosystem services are protected and enhanced.

4.2 Baseline data

Internationally and European designated sites

- 4.2.1 Habitats sites (previously referred to as European sites) provide valuable ecological infrastructure for the protection of rare, endangered and/or vulnerable natural habitats and species of exceptional importance within the EU. These sites consist of Special Areas of Conservation (SACs), designated under European Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive), and Special Protection Areas (SPAs), classified under European Directive 2009/147/EC on the conservation of wild birds (the Birds Directive). Additionally, paragraph 176 of the NPPF requires that sites listed under the Ramsar Convention (The Convention on Wetlands of International Importance, especially as Waterfowl Habitat) are to be given the same protection as fully designated European sites.
- 4.2.2 Following the UK's exit from the EU, all European designated sites and species will retain the same levels of protection. A publication from Defra⁴⁰ outlines the extent of the

³⁶ Environment Act 2021. Available at: <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted> [Date accessed: 26/10/22]

³⁷ Natural England (2019) Biodiversity Metric 2.0. Available at: <http://publications.naturalengland.org.uk/publication/5850908674228224> [Date accessed: 26/10/22]

³⁸ Natural England (2022) Biodiversity Metric Milestone – Defra consultation on the biodiversity metric. Available at: <https://naturalengland.blog.gov.uk/2022/08/05/biodiversity-metric-milestone-defra-consultation-on-the-biodiversity-metric/> [Date accessed: 01/11/22]

³⁹ HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf [Date accessed: 26/10/22]

⁴⁰ Defra (2021) Changes to the Habitats Regulations 2017. Available at: <https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017> [Date accessed: 26/10/22]

- changes made to the Conservation of Habitats and Species Regulations 2017 (as amended), which largely relate to transferring functions from the European Commission to the relevant authorities in the UK.
- 4.2.3 The area within which development proposals could potentially have direct, indirect and in-combination impacts on the integrity of a Habitats site is referred to as the Zone of Influence (ZOI). This is determined through an identification of sensitive receptors at each Habitats site (its qualifying features) and pathways via which the Local Plan may have an impact.
- 4.2.4 There are two Habitats sites located in proximity to the Plan area; 'Fens Pools' SAC and 'Cannock Extension Canal' SAC. Threats and pressures which could potentially be exacerbated by the development set out in the WLP could include habitat fragmentation and water pollution⁴¹. Some of the threats and pressures to Cannock Extension Canal SAC include water pollution and air pollution⁴². No ZOIs have been identified for these sites at the time of writing.
- 4.2.5 'Cannock Chase' SAC lies some 11.5km to the north east of Wolverhampton, at its closest point. The identified threats and pressures to the qualifying features of Cannock Chase SAC include air pollution (atmospheric nitrogen deposition), hydrological changes, wildfire/arson and public access and disturbance⁴³. A 15km ZOI for Cannock Chase SAC has been identified through analysis of visitor survey data⁴⁴, a proportion of which falls within Wolverhampton (see **Figure 4.1**). Development proposed within this zone could potentially have an adverse impact on the SAC.
- 4.2.6 A Habitats Regulations Assessment (HRA) is being prepared alongside the development of the Local Plan to provide an in-depth assessment of the potential threats and pressures to a number of Habitats sites and analysis of potential impact pathways. The outputs of the HRA process will help to inform the SA.

⁴¹ Natural England (2014) Site Improvement Plan: Fens Pools. Available at:
<http://publications.naturalengland.org.uk/file/4872756676001792> [Date accessed: 15/06/21]

⁴² Natural England (2014) Site Improvement Plan: Cannock Extension Canal. Available at:
<http://publications.naturalengland.org.uk/file/6749431462363136> [Date accessed: 15/06/21]

⁴³ Natural England (2014) Site Improvement Plan: Cannock Chase. Available at:
<http://publications.naturalengland.org.uk/publication/4957799888977920> [Date accessed: 15/06/21]

⁴⁴ Underhill-Day, J. & Liley, D. (2012) Cannock Chase Visitor Impacts Mitigation Report. Footprint Ecology. Unpublished Report.

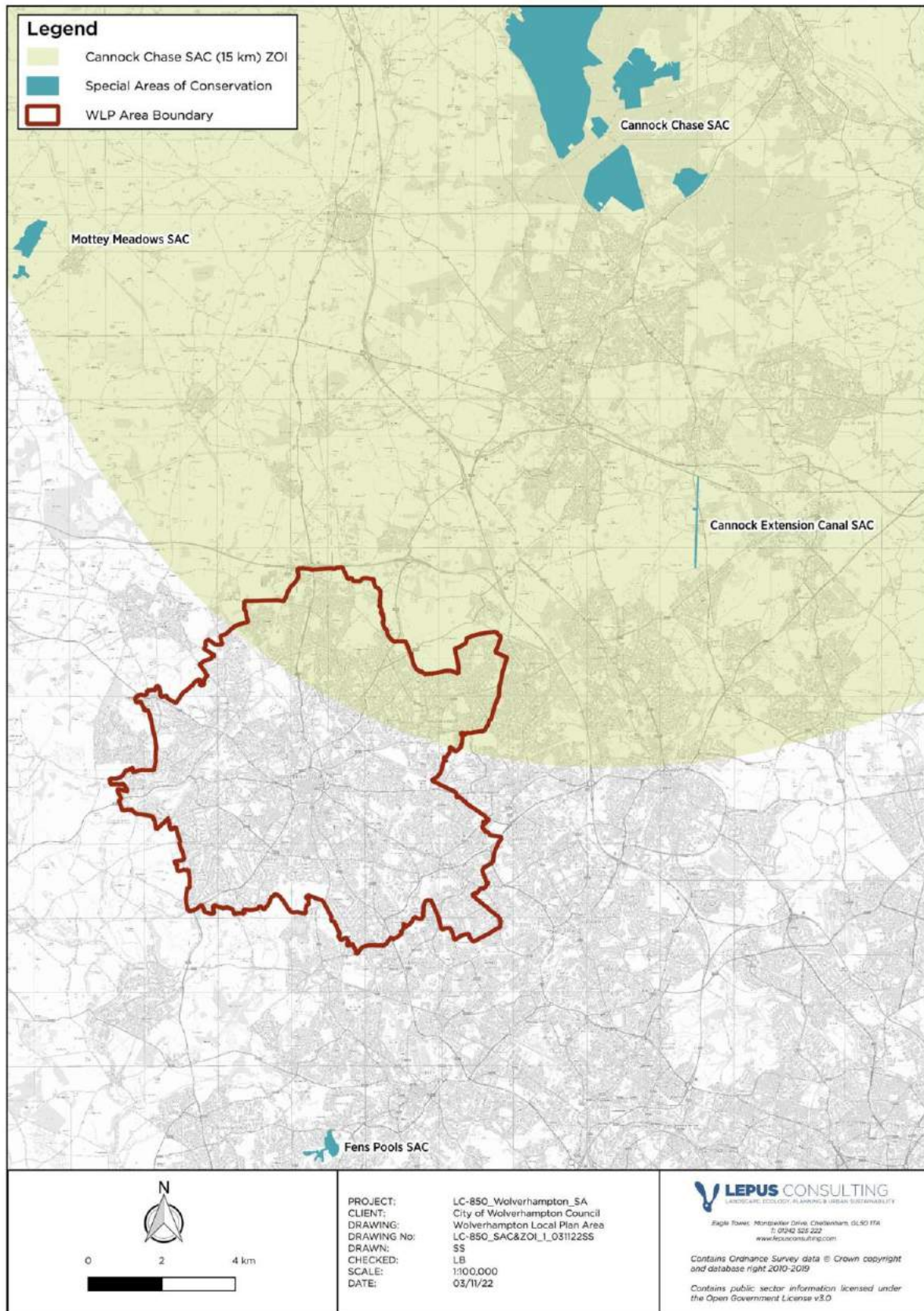


Figure 4.1: Location of Habitats sites and identified Zones of Influence in relation to the WLP area (source: Natural England)

Nationally designated sites

- 4.2.7 There are 18 Sites of Special Scientific Interest (SSSIs) located within the Black Country area, all of which fall within the adjacent Dudley or Walsall. These include Wren's Nest SSSI, The Leasowes SSSI, Clayhanger SSSI and Jockey Fields SSSI.
- 4.2.8 Natural England has developed Impact Risk Zones (IRZs) for each SSSI unit in the country. IRZs are a Geographical Information System (GIS) tool which allow a rapid initial assessment of the potential risks posed by development proposals to SSSIs. They define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts⁴⁵. Where a development proposal falls within more than one SSSI IRZ, the worst-case risk zone is reported upon in the assessment. Although there are no SSSIs within Wolverhampton itself, the city is covered by several IRZs for nearby SSSIs.
- 4.2.9 National Nature Reserves (NNRs) were established to protect some of the most important habitats, species and geology in the country and to provide 'outdoor laboratories' for research. Two thirds of the country's NNRs are managed by Natural England, the remainder being managed by organisations approved by Natural England, such as the RSPB, the Forestry Commission, Wildlife Trusts and local authorities. There are no NNRs located within the WLP area, the nearest being 'Wren's Nest' NNR approximately 1.5km to the south, in Dudley.

Priority Habitats

- 4.2.10 The current policy identified for UK Priority Habitats includes that provided by the NPPF paragraph 179, "*promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*"
- 4.2.11 Careful consideration should be given during the plan-making process to the potential impacts on Section 41 list of habitats and species of principle importance that flow from the Natural Environment and Rural Communities Act 2006⁴⁶.

⁴⁵ Natural England (2022) Natural England's Impact Risk Zones for Sites of Special Scientific Interest, 31 July 2022. Available at: <https://data.gov.uk/dataset/5ae2af0c-1363-4d40-9d1a-e5a1381449f8/sssi-impact-risk-zones> [Date accessed: 01/11/22]

⁴⁶ Natural Environment and Rural Communities Act 2006. Available at: <http://www.legislation.gov.uk/ukpga/2006/16/contents> [Date accessed: 26/10/22]

- 4.2.12 CWC is a member of the Birmingham and Black Country Biodiversity Action Plan (BBC BAP) Partnership, which works to deliver priority actions set out in the BBC BAP (2010)⁴⁷. Priority habitats present in Wolverhampton include:
- Good quality semi-improved grassland;
 - Deciduous woodland;
 - Coastal and floodplain grazing marsh;
 - Traditional orchard (small extents); and
 - Lowland meadows (small extents).
- 4.2.13 The BBC BAP indicates habitat creation targets for the area from 2010 to 2026. Habitats with targets for creation in the Black Country include:
- Coastal and floodplain grazing marsh;
 - Reedbeds;
 - Lowland meadows;
 - Lowland dry acid grassland;
 - Lowland heathland;
 - Hedgerows;
 - Traditional orchards; and
 - Native woodland.
- 4.2.14 The BBC BAP states that 131 species of principal importance for the purpose of conserving biodiversity within section 41 of the Natural Environment and Rural Communities Act 2006 have been recorded in Birmingham and the Black Country. In total there are 943 species in England
- 4.2.15 The Birmingham and the Black Country BAP has also identified 'Biodiversity Opportunity Areas' (BOAs) in the Black Country. BOAs are areas which either have a high density of priority habitat or which could be developed as a habitat network (see **Figure 4.2**).

⁴⁷ Wolverhampton City Council- Biodiversity Cabinet Report July 2013 final. Available at:
<https://wolverhampton.moderngov.co.uk/Data/Cabinet/201307241700/Agenda/Item%2018%20-%20Birmingham%20and%20Black%20Country%20Diodiversity%20Action%20Plan.pdf> [Date accessed: 26/10/22]

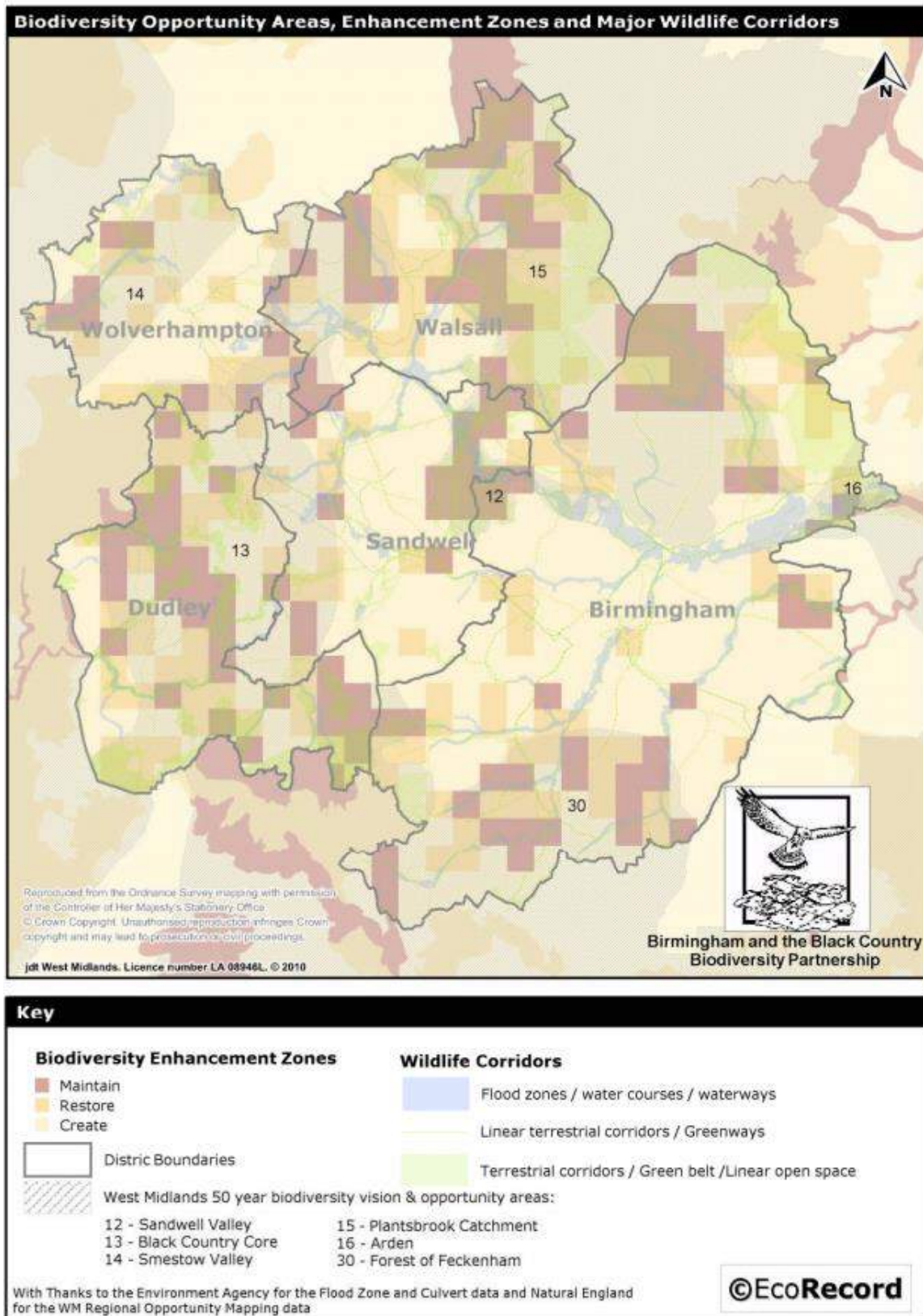


Figure 4.2: Biodiversity opportunity areas, enhancement zones and major wildlife corridors in Birmingham and the Black Country (source: EcoRecord)

Locally designated sites

- 4.2.16 The WLP area contains an important network of local designations running through the urban area, including Local Nature Reserves (LNR), Sites of Importance for Nature Conservation (SINC) and Sites of Local Importance for Nature Conservation (SLINC) for their geological importance. These also form important wildlife corridors, allowing species to move between habitats.
- 4.2.17 Following ecological survey work conducted between 2019 and 2022, a number of candidate SINC and SLINC have been identified by the Local Sites Partnership within the Black Country. At the time of writing, recommendations for two new SLINCs and one SLINC boundary change have not yet been formally designated through Local Sites Partnership approval and Cabinet approval. SINC and SLINCs, including emerging sites, are shown in **Figure 4.3**.
- 4.2.18 Natural England encourages local authorities to formally designate appropriate sites as 'Local Nature Reserves' under Section 21 of the National Parks and Access to the Countryside Act 1949⁴⁸. A Local Nature Reserve (LNR) designation demonstrates a commitment by the local authority to manage land for biodiversity, protect it from inappropriate development and provide opportunities for local people to study and enjoy wildlife. Within the plan area, there is only one fully designated LNR (Smestow Valley LNR) and one emerging LNR (Wyrley & Essington Canal LNR) which has been approved by the Cabinet on 14th June 2017 but is awaiting formal approval by Natural England (both are shown on **Figure 4.3**).

Ancient Woodland

- 4.2.19 Ancient woodland is defined as an area that has been wooded continuously since at least 1600AD and includes 'ancient semi-natural woodland' and 'plantations on ancient woodland sites', both of which have equal protection under the NPPF⁴⁹. Paragraph 180 of the NPPF states, "*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁵³ and a suitable compensation strategy exists*".
- 4.2.20 There are some small areas of ancient woodland located within the City of Wolverhampton (see **Figure 4.3**), providing important habitat for rare and threatened species, as well as ecosystem services including soil stability and cultural value.

⁴⁸ National Parks and Access to the Countryside Act 1949. Available at: <http://www.legislation.gov.uk/ukpga/Geo6/12-13-14/97> [Date accessed: 26/10/22]

⁴⁹ Forestry Commission and Natural England (2018) Ancient woodland, ancient trees and veteran trees: protecting them from development. Available at: <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences> [Date accessed: 26/10/21]

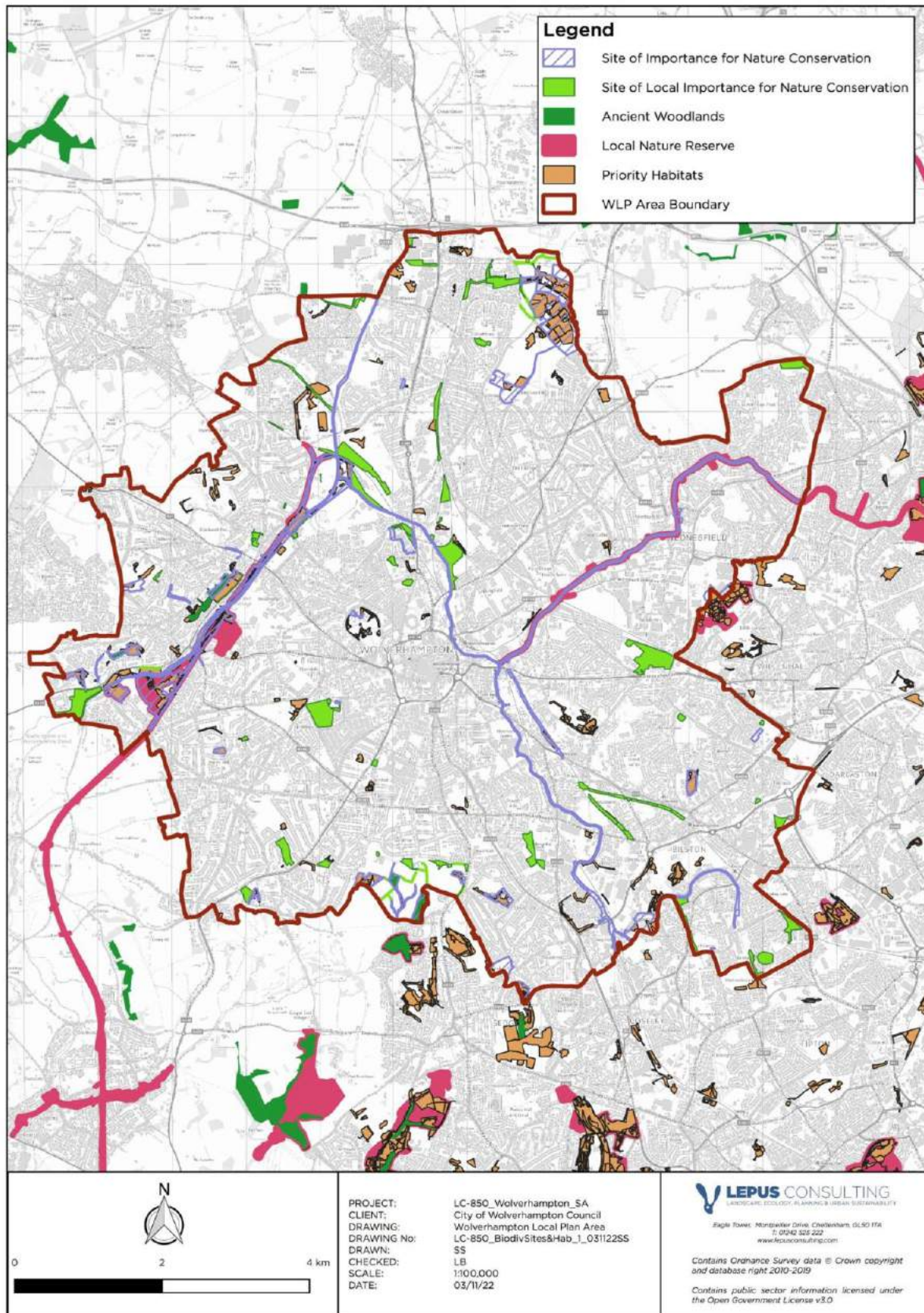


Figure 4.3: Biodiversity sites and habitats in and around the WLP area (source: Natural England and CWC)

Green Infrastructure

- 4.2.21 Green Infrastructure (GI) is an important aspect of biodiversity. It is often described as a strategically planned network of multifunctional assets including natural and semi-natural areas, features and green spaces in rural and urban, terrestrial and freshwater environments, which together enhance ecosystem health and resilience, contribute to biodiversity conservation and benefit human populations through the maintenance and enhancement of ecosystem services.
- 4.2.22 Much of the City of Wolverhampton is heavily urbanised, with a lack of mature trees within the district centres. Lack of GI results in a reduced capability of the environment to provide ecosystem services including the storage and filtration of water, providing natural flood protection, as well as reduced availability of habitats and connectivity within the green network enabling movement of species.
- 4.2.23 Development proposals could potentially result in benefits to biodiversity, through the incorporation of GI, delivery of environmental net gain and contributions towards strategic Nature Recovery Networks. A Nature Recovery Network is a connected system of habitats that are important for flora and fauna⁵⁰. The redevelopment of brownfield sites could also help to improve the biological and geological value of an area.

River ecology

- 4.2.24 The WLP area lies within the Humber and Severn river basins (see **Figure 4.4**).
- 4.2.25 The River Basin Management Plans (RBMP) for the Severn⁵¹ and the Humber⁵² provide an update on the ecological statuses of the water environment. The water bodies comprising the Severn and Humber are presented in **Table 4.1** and **Table 4.2**. An overview of their ecological status is presented in **Table 4.3**.
- 4.2.26 The RBMPs present the following objectives of the Water Framework Directive:
- To prevent deterioration of the status of surface waters and groundwater;
 - To achieve objectives and standards for protected areas;

⁵⁰The Wildlife Trusts Birmingham and Black Country (no date) Nature Recovery Network. Available at: <https://www.bbcwildlife.org.uk/NatureRecoveryNetwork> [Date accessed: 25/10/22]

⁵¹Environment Agency (2015) Water for life and livelihoods Part 1: Severn river basin district River basin management plan. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718336/Severn_RBMP_Part_1_river_basin_management_plan.pdf [Date accessed: 25/10/22]

⁵²Environment Agency (2015) Water for life and livelihoods Part 1: Humber river basin district River basin management plan. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718328/Humber_RBMP_Part_1_river_basin_management_plan.pdf [Date accessed: 25/10/22]

- To aim to achieve good status for all water bodies or, for heavily modified water bodies and artificial water bodies, good ecological potential and good surface water chemical status;
- To reverse any significant and sustained upward trends in pollutant concentrations in groundwater;
- The cessation of discharges, emissions and losses of priority hazardous substances into surface waters and;
- Progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants

Table 4.1: Number of water bodies in the Severn river basin.

Water body categories	Natural	Artificial	Heavily modified	Total
Rivers, canals and surface water transfers	560	47	74	681
Lake	14	7	47	68
Coastal	0	0	0	0
Estuarine	1	0	5	6
Groundwater	42	0	0	42
Totals	617	54	126	797

Table 4.2: Number of water bodies in the Humber river basin.

Water body categories	Natural	Artificial	Heavily modified	Total
Rivers, canals and surface water transfers	457	105	282	844
Lake	11	19	104	134
Coastal	0	0	2	2
Estuarine	1	2	4	7
Groundwater	51	0	0	51
Totals	520	126	392	1038

Table 4.3: Ecological status of Severn and Humber river basin surface waterbodies.

Ecological status or potential	Definition of status	No. of water bodies in Severn river basin	No. of water bodies in Humber river basin
High	Near natural conditions. No restriction on the beneficial uses of the water body. No impacts on amenity, wildlife or fisheries.	0	0
Good	Slight change from natural conditions as a result of human activity. No restriction on the beneficial uses of the water body. No impact on amenity or fisheries. Protects all but the most sensitive wildlife.	151	148
Moderate	Moderate change from natural conditions as a result of human activity. Some restriction on the beneficial uses of the water body. No impact on amenity. Some impact on wildlife and fisheries.	462	671

Ecological status or potential	Definition of status	No. of water bodies in Severn river basin	No. of water bodies in Humber river basin
Poor	Major change from natural conditions as a result of human activity. Some restrictions on the beneficial uses of the water body. Some impact on amenity. Moderate impact on wildlife and fisheries.	134	136
Bad	Severe change from natural conditions as a result of human activity. Significant restriction on the beneficial uses of the water body. Major impact on amenity. Major impact on wildlife and fisheries with many species not present.	8	32

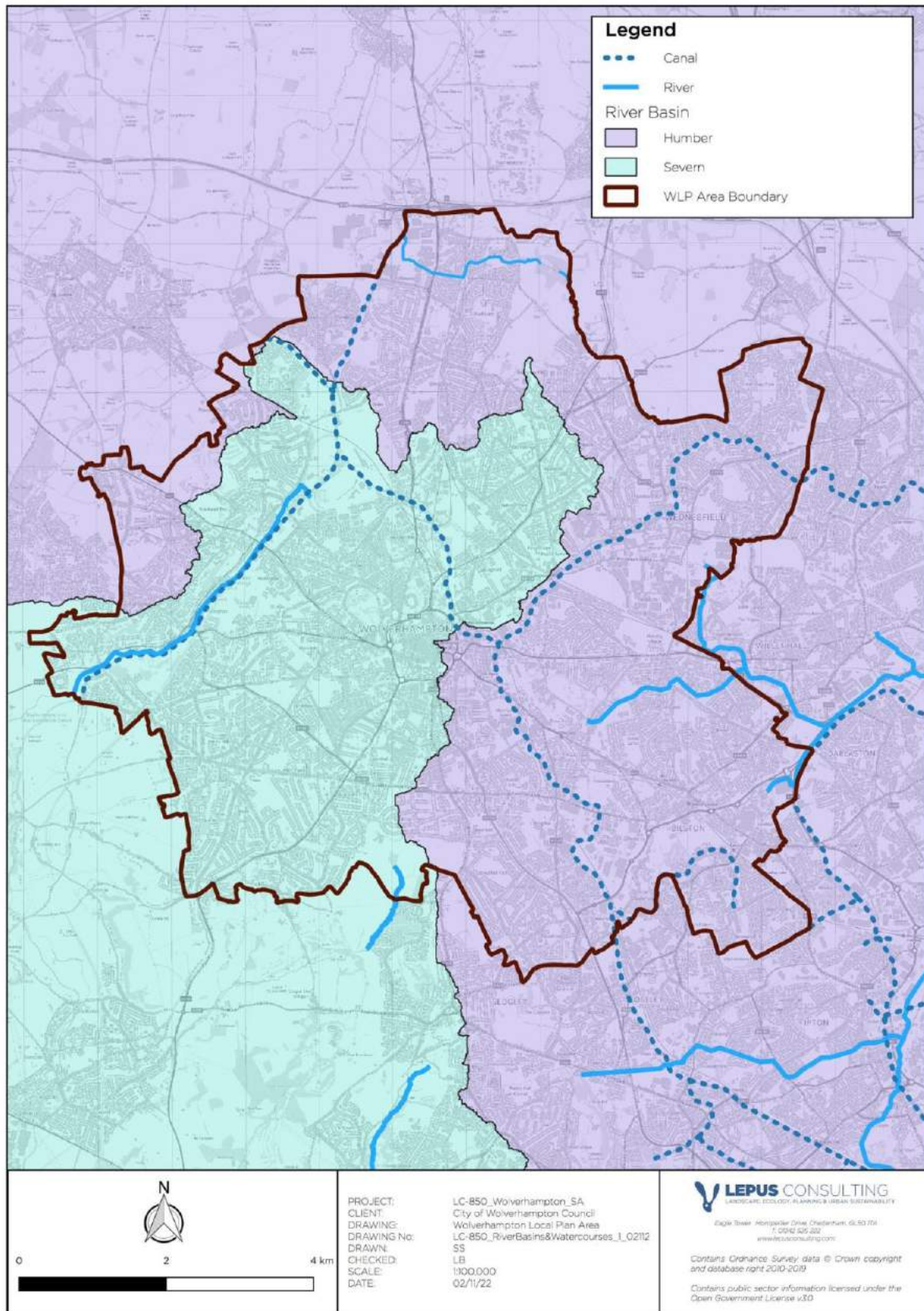


Figure 4.4: River Basins and watercourses in the WLP area (source: Environment Agency)

Geodiversity

- 4.2.27 Geodiversity is the collective term describing the geological variety of the Earth's rocks, fossils, minerals, soils and landscapes together with the natural process that form and shape them. Geodiversity underpins biodiversity by providing diversity of habitats and the ecosystem, with the soil being the link between them. It also embraces the built environment by providing the basis for neighbourhood character and local distinctiveness through building stone and material. There are 15 Regionally Important Geodiversity Sites (RIGS) within the West Midlands area, but none within the City of Wolverhampton.
- 4.2.28 Relative to its size, the Black Country has the most diverse geology in the world⁵³, with a number of geological sites of note, including those with exposures of geological features and formations, and areas of geoscientific interest. Geology across the region has been influenced by human settlement, water supply and industry location, in particular major industries such as mining, iron and steel production, foundries, glass manufacture and brickmaking across the mineral-rich area.
- 4.2.29 The Black Country Authorities Minerals Study (2019)⁵⁴ states that the underlying geology of the Black Country is complex. Concerning the key strata and deposits studied, it identifies that:
- 4.2.30 *"The bedrock geology comprises mainly sedimentary rocks, including strata, limestones, sandstones, siltstones, mudstones, ironstone, shales, claystones and Coal Measures strata and coal seams representing Silurian to Triassic age. Igneous intrusions of dolerite rock occurred through the sedimentary strata in the Carboniferous. In many parts of The Black Country superficial (drift) deposits overly the bedrock strata predominantly comprising recent river Alluvial and Terrace deposits, Glacial and Fluvio-glacial deposits of primarily boulder clays, silts, sands and gravels".*
- 4.2.31 Concerning superficial deposits in the Black Country, the minerals study states that:
- 4.2.32 *"Superficial drift deposits provide a cover overlying the bedrock across much of the region. The principal lithologies are Till (Boulder Clay), sand and gravel, silts and clay. They were deposited in Quaternary and Recent times during glacial, interglacial, periglacial, post glacial, fluvial and lacustrine environments. Locally the drift deposits have filled historical channels or valleys in the bedrock and reach significant thicknesses in the deeper channels."*

⁵³ The Black Country Geological Society (2020) Black Country geology. Available at: <https://bcgs.info/pub/local-geology/black-country-geology/> [Date accessed: 01/11/22]

⁵⁴ Black Country Authorities. Black Country Joint Core Strategy. Minerals Study 2019. Available at: <https://blackcountryplan.dudley.gov.uk/t2/p4/t2p4f/> [Date accessed: 26/10/22]

4.3 Key Issues

- There are a few BAP habitats and species present within the Local Plan area, which should continue to be managed and conserved appropriately.
- Enhancements to the Core Strategy area's GI network will support local and sub-regional biodiversity networks through helping to improve connectivity for habitats and species.
- Growth within the WLP area is likely to put pressure on biodiversity. There are potential impacts from habitat fragmentation resulting from new development areas and recreational pressures on wildlife sites.
- Geodiversity is a key contributor to the WLP's natural environment and may be affected by noise or light pollution.

5 Climatic factors

5.1 Introduction

- 5.1.1 Anthropogenic climate change is predominantly the result of greenhouse gas (GHG) emissions. GHGs are emitted from a wide variety of sources, including transport, construction, agriculture and waste. Typically, development leads to a net increase in GHG emissions in the local area, although efforts can be made to help limit these increases.
- 5.1.2 The Climate Change Act 2008⁵⁵ is the basis for the UK's approach to tackling and responding to climate change. It requires that emissions of carbon dioxide and other GHGs are reduced and that climate change risks are prepared for. The Act also establishes the framework to deliver on these requirements.
- 5.1.3 The UK is a member of the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC is the key forum which oversees international action to tackle climate change. The UNFCCC led the development and adoption of The Paris Agreement in 2015⁵⁶. A total of 160 countries have pledged to cut their emissions as part of this process. The Committee on Climate Change (CCC) report 'Net Zero – The UK's contribution to stopping global warming'⁵⁷ recommended new emission targets: reducing GHG emissions by at least 100% of 1990 levels (net zero) by 2050.
- 5.1.4 CWC declared a Climate Emergency in July 2019⁵⁸. All actions that the council is undertaking, following the declaration of a Climate Emergency, fall into three fields – Council, City and Community⁵⁹.
- 5.1.5 The CCC's latest progress report⁶⁰ discusses the need for further measures to be implemented by the government to ensure the UK meets the target of net zero by 2050.

⁵⁵ Climate Change Act 2008. Available at: <http://www.legislation.gov.uk/ukpga/2008/27/contents> [Date accessed: 26/10/22]

⁵⁶ United Nations Climate Change (2015) The Paris Agreement. Available at: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> [Date accessed: 26/10/22]

⁵⁷ Committee on Climate Change (2019) Net Zero – The UK's contribution to stopping global warming. Available at: <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/> [Date accessed: 26/10/22]

⁵⁸ Declare a Climate Emergency (2020) List of Councils who have declared a climate emergency. Available at: <https://www.climateemergency.uk/blog/list-of-councils/> [Date accessed: 26/10/22]

⁵⁹ Wolverhampton City Council. Our Climate Commitment. Available at: <https://www.wolverhampton.gov.uk/sites/default/files/2020-01/Future%20Generations%20-%20Our%20Climate%20Committment.pdf> [Date accesses: 26/10/22]

⁶⁰ Reducing UK emissions: 2021 Progress Report to Parliament. Available at: <https://www.theccc.org.uk/publication/2021-progress-report-to-parliament/> [Date accessed: 26/10/22]

- 5.1.6 Commitments to reduce GHG emissions have been introduced from the international level to the sub-regional level. The PPPs address policy development across all sectors and at all levels, combining both demand management (reduced energy consumption and increased efficiency of use) and supply-side measures (low carbon options and renewables).
- 5.1.7 Climate change and energy efficiency PPPs to encourage sustainable development are set out by central government. The national Building Regulations, as updated March 2015⁶¹, require certain levels of sustainable construction to be met and provide guidance on additional, optional regulations for water and access. The UK Government has outlined, through the Localism Act, the importance of sustainable development and its commitments to reducing carbon emissions and GHGs.
- 5.1.8 The Environment Agency (EA) provides guidance on flood risk for planners, developers and advisors in order to inform flood risk assessments and the plan-making process and stresses the importance of making allowances for climate change⁶².
- 5.1.9 Adaptation measures proposed by the PPPs include a presumption against development in flood risk areas, appropriate design of new development, the promotion of new infrastructure such as Sustainable Drainage Systems (SuDS), measures to increase biodiversity, measures dealing with overheating and improved maintenance to help address the changes that are likely to occur as a result of climate change. Through this approach, the Government is seeking to ensure that flood risk is taken into account at all stages of the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk.

5.2 Baseline data

Carbon emissions

- 5.2.1 Climatic and anthropogenic-induced climate change are increasing concerns for the WLP area. Emissions could continue to rise, and future development may not be as low carbon as possible, with potential for little demand for locally generated sustainable energy. It will therefore be an important role of the Local Plan to encourage sustainable development and construction and support low carbon energy sources.

⁶¹ The Building Regulations (Amendment) Regulations 2015. Available at:
<https://www.legislation.gov.uk/uksi/2015/767/contents/made> [Date accessed: 26/10/22]

⁶² Environment Agency (2021) Flood risk assessments: climate change allowances. Available at:
<https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances> [Date accessed: 26/10/22]

5.2.2 The requirement to improve the energy efficiency of homes stems from the legal requirements to reduce carbon dioxide (CO₂) emissions set out in the Climate Change Act 2008 and the government’s Carbon Plan, published in 2011. The Carbon Plan⁶³ sets to reduce CO₂ emissions by 29% by 2017, 35% by 2022, and 50% by 2027 – for buildings this means a reduction between 24% and 39% compared to 2009 levels by 2027.

5.2.3 As of 2019, the City of Wolverhampton’s per capita emissions are lower than the West Midlands and the national average (see **Table 5.1**). A major source of GHGs is from vehicle emissions. The majority of residents would be likely to have at least one vehicle per household. It is likely that residential development proposed within the Plan area would result in an associated increase in the number of vehicles on the road in the Plan area, and as such a consequent increase in GHG emissions would be expected, contributing to the Greenhouse Effect and exacerbating anthropogenic climate change.

Table 5.1: Estimated CO₂ emissions in 2019⁶⁴

	Total CO ₂ emissions estimates (kt CO ₂)	Per Capita CO ₂ emissions (kt CO ₂)
Wolverhampton	925.2	3.5
West Midlands	29978.9	5.1
National Total	344,511.6	5.2

5.2.4 **Table 5.2** shows that there has been an overall decrease in the total volume of carbon dioxide (CO₂) emissions in all sectors within the West Midlands and the WLP area from 2005 to 2019.

Table 5.2: Per capita carbon dioxide emissions by sector: regional summary 2019 (kt CO₂)⁶⁵

Region/ Country	Industrial & commercial	Public Sector	Domestic	Transport	Total	Change from previous year
West Midlands	8804.9	1095.2	8218.4	12106.1	29978	4.52%
Wolverhampton	226.6	51.2-50.4	362-352.8	297.2	925.2	4.45%

⁶³ The Carbon Plan - reducing greenhouse gas emissions. Available at: <https://www.gov.uk/government/publications/the-carbon-plan-reducing-greenhouse-gas-emissions--2> [Date accessed: 03/11/22]

⁶⁴ UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2019. Available at: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2019> [Date accessed: 26/10/22]

⁶⁵ UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2019. Available at: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2019> [Date accessed: 26/10/22]

Potential Effects of Climate Change

5.2.5 In June 2009 the outcome of research on the probable effects of climate change in the UK was released by the UK Climate Projections (UKCP09) team⁶⁶. UKCP09 gives climate information for the UK up to the end of this century and projections of future changes to the climate are provided, based on simulations from climate models. Projections are broken down to a regional level across the UK and are shown in probabilistic form, which illustrate the potential range of changes and the level of confidence in each prediction.

5.2.6 As highlighted by the research, the effects of climate change for the West Midlands climate by 2050 for a medium emissions scenario⁶⁷ are likely to be as follows:

- Under medium emissions, the central estimate of increase in **winter mean temperature** is 2.1°C; it is very unlikely to be less than 1.2°C and is very unlikely to be more than 3.2°C. A wider range of uncertainty is from 0.9°C to 3.5°C.
- Under medium emissions, the central estimate of increase in **summer mean temperature** is 2.6°C; it is very unlikely to be less than 1.2°C and is very unlikely to be more than 4.4°C. A wider range of uncertainty is from 1°C to 4.8°C.
- Under medium emissions, the central estimate of increase in **summer mean daily maximum temperature** is 3.6°C; it is very unlikely to be less than 1.3°C and is very unlikely to be more than 6.5°C. A wider range of uncertainty is from 1.1°C to 7.2°C.
- Under medium emissions, the central estimate of increase in **summer mean daily minimum temperature** is 2.7°C; it is very unlikely to be less than 1.1°C and is very unlikely to be more than 4.8°C. A wider range of uncertainty is from 1°C to 5.3°C.
- Under medium emissions, the central estimate of change in **annual mean precipitation** is 0%; it is very unlikely to be less than -5% and is very unlikely to be more than 6%. A wider range of uncertainty is from -6% to 6%.
- Under medium emissions, the central estimate of change in **winter mean precipitation** is 13%; it is very unlikely to be less than 2% and is very unlikely to be more than 27%. A wider range of uncertainty is from 1% to 30%.
- Under medium emissions, the central estimate of change in **summer mean precipitation** is -17%; it is very unlikely to be less than -37% and is very

⁶⁶ UK Climate Projections. Available at: <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp> [Date accessed: 27/10/22]

⁶⁷ UK Climate Projections West Midlands. Medium emissions scenario. Available at: <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp> [Date accessed: 27/10/22]

unlikely to be more than 6%. A wider range of uncertainty is from -39% to 14%.

5.2.7 Presented below are a series of graphs to illustrate UKCP09 information for the West Midlands region of England over a wider timescale to the end of the century, including changes in annual mean temperature (**Figure 5.1**), summer mean precipitation (**Figure 5.2**) and winter mean precipitation (**Figure 5.3**). This is presented in five (10, 33, 50, 67 and 90%) probability levels for each 30-year time period.

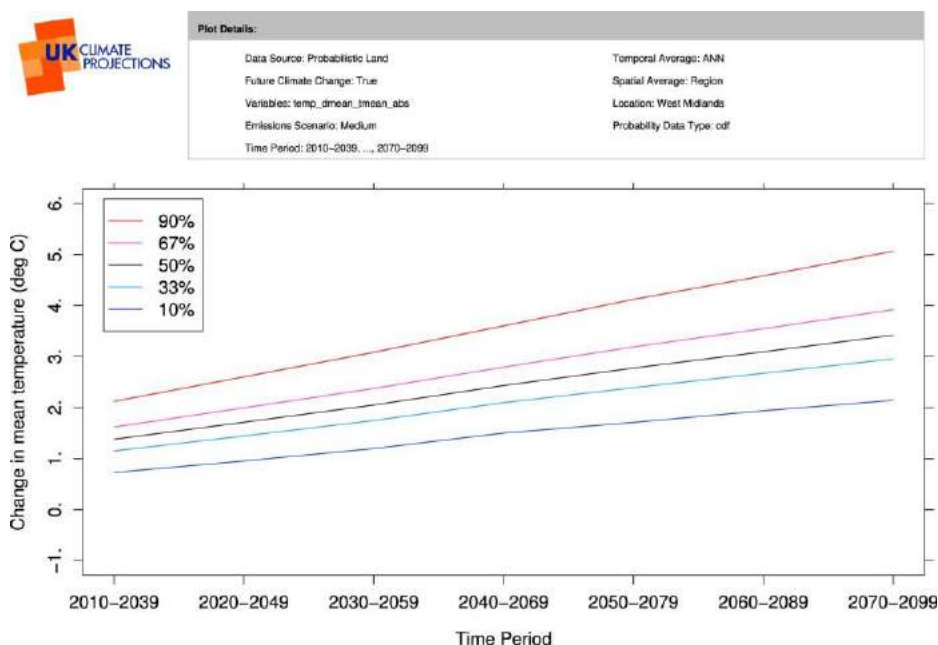


Figure 5.1: Changes in annual mean temperature in the West Midlands region of England to 2099 as a result of a medium emissions scenario⁶⁸

⁶⁸ UK Climate Projections (2014) West Midlands. Available at: <http://ukclimateprojections.metoffice.gov.uk/21708> [Date accessed: 27/10/22]

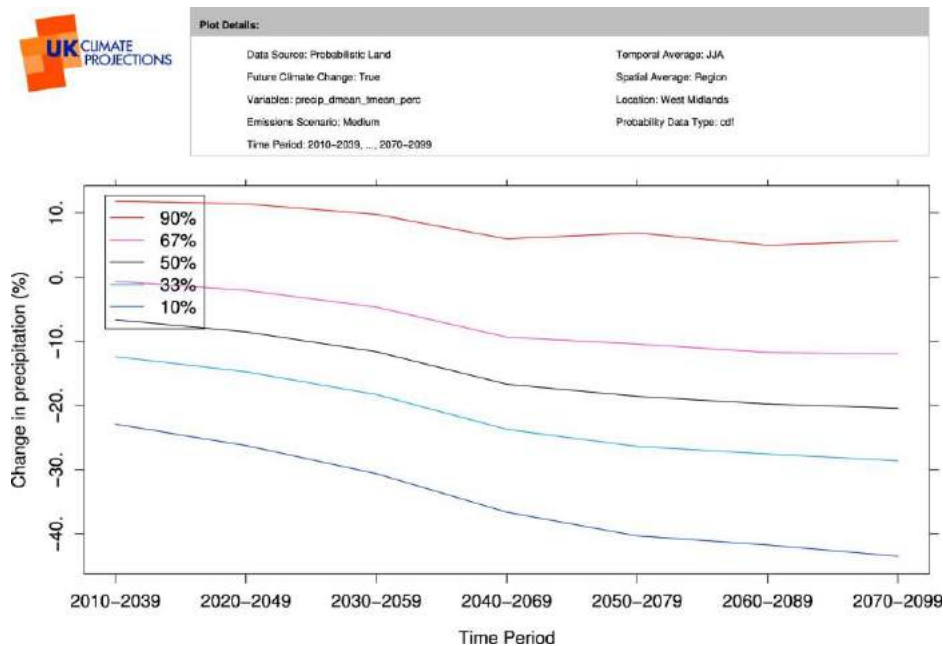


Figure 5.2: Changes in summer mean precipitation in the West Midlands region of England to 2099 as a result of a medium emissions scenario⁶⁹

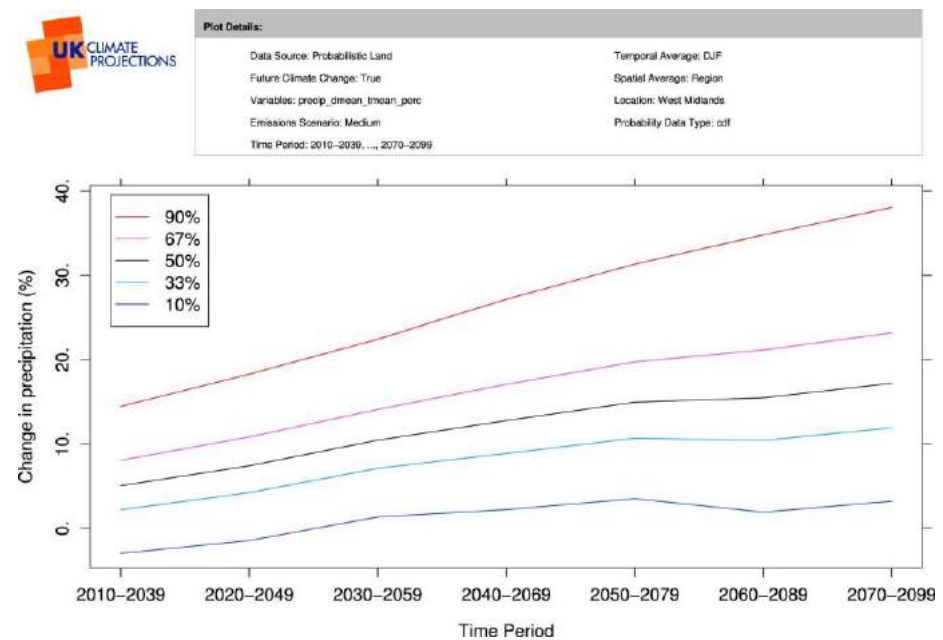


Figure 5.3: Changes in winter mean precipitation in the West Midlands region of England to 2099 as a result of a medium emissions scenario⁷⁰

⁶⁹ UK Climate Projections (2014) West Midlands. Available at: <http://ukclimateprojections.metoffice.gov.uk/21708> [Date accessed: 27/10/22]

⁷⁰ UK Climate Projections (2014) West Midlands. Available at: <http://ukclimateprojections.metoffice.gov.uk/21708> [Date accessed: 27/10/22]

5.2.8 The City of Wolverhampton’s Sustainability Strategy and Implementation Plan⁷¹ commits the city council to the following:

- Set locally owned and determined commitments and actions to reduce carbon emissions and to manage climate impacts which are specific, measurable and challenging;
- Publish our commitments, actions and progress, enabling local communities to hold us to account;
- Share the learning from our experiences and achievements with other councils; and
- Regularly refresh our commitments and actions to ensure they are current and continue to reflect local priorities.

Renewable Energy

5.2.9 One strategy to combat GHG emissions is to reduce the quantity of energy produced via fossil fuel led energy production⁷². In the last two decades, there has been a significant increase in the volume of energy generated through renewable energy sources. In 2017, 29.3% of the electricity generated in the UK was from renewable sources, compared to 24.5% in 2016⁷³.

5.2.10 The promotion of on-site renewable or low carbon technologies incorporated with new development in the WLP would help to decrease reliance on energy that is generated from unsustainable sources, such as fossil fuels. A reduction in the use of fossil fuels would help to reduce the volume of GHGs that are emitted into the atmosphere. This in turn would reduce the City of Wolverhampton’s contribution towards the causes of climate change.

Table 5.3: Total renewable energy generation in Megawatt (MW) in Wolverhampton and West Midlands between 2019 and 2021⁷⁴

Renewable Energy Generation (MWh)	2019	2020	2021
Wolverhampton	26.4	26.8	27.4
West Midlands	2295.9	2307.4	1272.4

⁷¹ Sustainability Strategy and Implementation Plan 2013-2018. Available at: <https://wolverhampton.moderngov.co.uk/documents/s15441/CC%2010.6%20Sustainability%20Strategy%20and%20Implementation%20Plan%202013%20-%202018.pdf> [Date accessed: 1/11/22]

⁷² RTPi (2018) Renewable Energy: Planning’s role in delivering renewable energy in the new low carbon economy. Available at: <https://www.rtpi.org.uk/research/2018/june/renewable-energy/> [Date accessed: 27/10/22]

⁷³ Department for Business, Energy and Industrial Strategy (2018) UK Energy in Brief. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728374/UK_Energy_in_Brief_2018.pdf [Date accessed: 27/10/22]

⁷⁴ Department for Business, Energy & Industrial Strategy (2019) Renewable electricity by local authority. Available at: <https://www.gov.uk/government/statistics/regional-renewable-statistics> [Date accessed: 27/10/22]

5.2.11 The layout and design of future development can have benefits to achieving sustainable development and reducing contributions to climate change. Although specific detail of development is outside the scope of a Local Plan, the WLP could potentially help encourage the development of more energy efficient homes to help reduce the overall carbon emissions of Wolverhampton. Energy efficient homes are those that are designed to reduce the demand on energy and improve energy efficiency in the home. Energy efficient homes can include Eco Houses; Zero Carbon Homes and Passivhaus⁷⁵.

Flooding

5.2.12 Climate change is anticipated to increase the risk of extreme weather events. Of particular concern in the UK is the rising risk of fluvial, surface water and coastal flooding. In 2009 the Environment Agency estimated 2.4 million properties in England were susceptible to fluvial and/or coastal flooding, whilst 3.8 million properties in England were susceptible to surface water flooding⁷⁶. Flooding is the most significant issue related to climate change impacts in the WLP area. The risk of surface water flooding in urban areas may increase in particular in the light of more torrential and frequent rainfall events especially during winter and the risk of tidal flooding is likely to be affected by sea level rise.

5.2.13 A network of waterways course through the WLP area, associated with the River Severn and River Humber (see **Figure 4.4**). Associated with these waterways are differing extents of fluvial flood risk. The significant majority of the WLP area is within Flood Zone 1, where fluvial flood risk is low; however, there are some extents of Flood Zone 2, 3a and 3b located to the north, south west and south east of Wolverhampton (see **Figure 5.4**).

5.2.14 A Level 1 Strategic Flood Risk Assessment (SFRA)⁷⁷ identified flood risk across the Black Country from all sources, in the present and in the future. The assessment has identified potential increases in flood risk due to climate change and produced modelled outputs. **Figure 5.4** also shows the 'Indicative Flood Zones' identified in this study, within the WLP area. Indicative Flood Zone 3b has been compiled using available hydraulic modelling scenarios, and for areas outside of detailed model coverage, Flood Zone 3a is used as a conservative indication.

⁷⁵ Urbanist Architecture. How to design Eco, Passivhaus and Zero Carbon Homes. Available at: <https://urbanistarchitecture.co.uk/how-to-design-eco-houses-passivhaus-and-zero-carbon-houses/> [Date accessed: 01/11/22]

⁷⁶ Environment Agency (2009) Flooding in England: National Assessment of Flood Risk. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/292928/geho0609bqds-e-e.pdf [Date accessed: 27/10/22]

⁷⁷ JBA Consulting (2020) The Black Country Authorities Level 1 Strategic Flood Risk Assessment Final Report 25th June 2020. Available at: <https://blackcountryplan.dudley.gov.uk/t2/p4/t2p4h/> [Date accessed: 03/11/22]

- 5.2.15 In addition to fluvial (river) flooding, properties and infrastructure within the Black Country are also at risk of flooding from other, more localised, sources. Other potential sources of flooding include groundwater flooding, sewer flooding, and surface water flooding.
- 5.2.16 Extents of low, medium and high surface water flood risk are present across the WLP area (see **Figure 5.5**). Surface water flooding typically occurs when intense rainfall overwhelms drainage systems⁷⁸. Surface water flooding is usually temporary and low impact in comparison to fluvial flood events. Groundwater flooding is the emergence of groundwater at the surface away from river channels, or the rising of groundwater into man-made ground⁷⁹. Higher groundwater levels can mean that sewers are unable to function efficiently. For example, if the water table rises above the level at which a sewer has been laid, water may seep into the sewer through joints or manholes and thereby reduce its capacity to carry its normal load. This can result in an increased risk of sewer flooding.
- 5.2.17 Many of the watercourses in the urban areas of the Black Country, including Wolverhampton, have been heavily modified, including approximately 63km of culverted watercourses⁸⁰. These modifications have the potential to cause or exacerbate flood risk, for example due to blockages forming in culverts or becoming overwhelmed in high rainfall events. Future development within the area could increase the risk of flooding posed to neighbouring areas if not carefully managed.
- 5.2.18 Careful consideration should be given to the level of flood risk new residents are exposed to, as well as the impacts of development on risk. In addition to the SFRA, localised issues have been identified within the 'The Black Country Local Strategy for Flood Risk Management' (2016)⁸¹.

⁷⁸ Environment Agency. Flood risk maps for surface water: how to use the map. Available at: <https://www.gov.uk/government/publications/flood-risk-maps-for-surface-water-how-to-use-the-map> [Date accessed: 22/10/22]

⁷⁹ British Geological Survey (2022) Groundwater flooding research overview. Available at: https://www2.bgs.ac.uk/groundwater/flooding/groundwater_flooding.html [Date accessed: 27/10/22]

⁸⁰ JBA Consulting (2020) The Black Country Authorities Level 1 Strategic Flood Risk Assessment: Final Report, 25th June 2020. Available at: https://blackcountryplan.dudley.gov.uk/media/15818/2018s1436-black-country-councils-level-1-sfra-final-50_redacted.pdf [Date accessed: 01/11/22]

⁸¹ Black Country Local Authorities & WSP Parsons Brinckerhoff (2016) Local Strategy for Flood Risk Management. Available at: https://www.wolverhampton.gov.uk/sites/default/files/pdf/Local_Flood_Risk_Management_Strategy_-_The_Black_Country_final_version.pdf [Date accessed: 27/10/22]

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- 5.2.19 It is good practice to make allowances for climate change in flood risk assessments⁸². Allowing for the impacts of climate change help to minimize vulnerability whilst providing greater resilience to flooding by anticipating changes to peak river flows, peak rainfall intensities, sea level rise and offshore wind speeds. Climate change allowances can be based on climate change projections under different CO₂ scenarios.
- 5.2.20 Increased naturalisation of watercourses and restoration of the flood plain, including the opening up of culverts where possible, would help to reduce the risk of flooding, as well as provide benefits to biodiversity, amenity and water quality.

⁸² Environment Agency (2020) Flood risk assessments: climate change allowances. Available at: <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances> [Date accessed: 27/10/22]

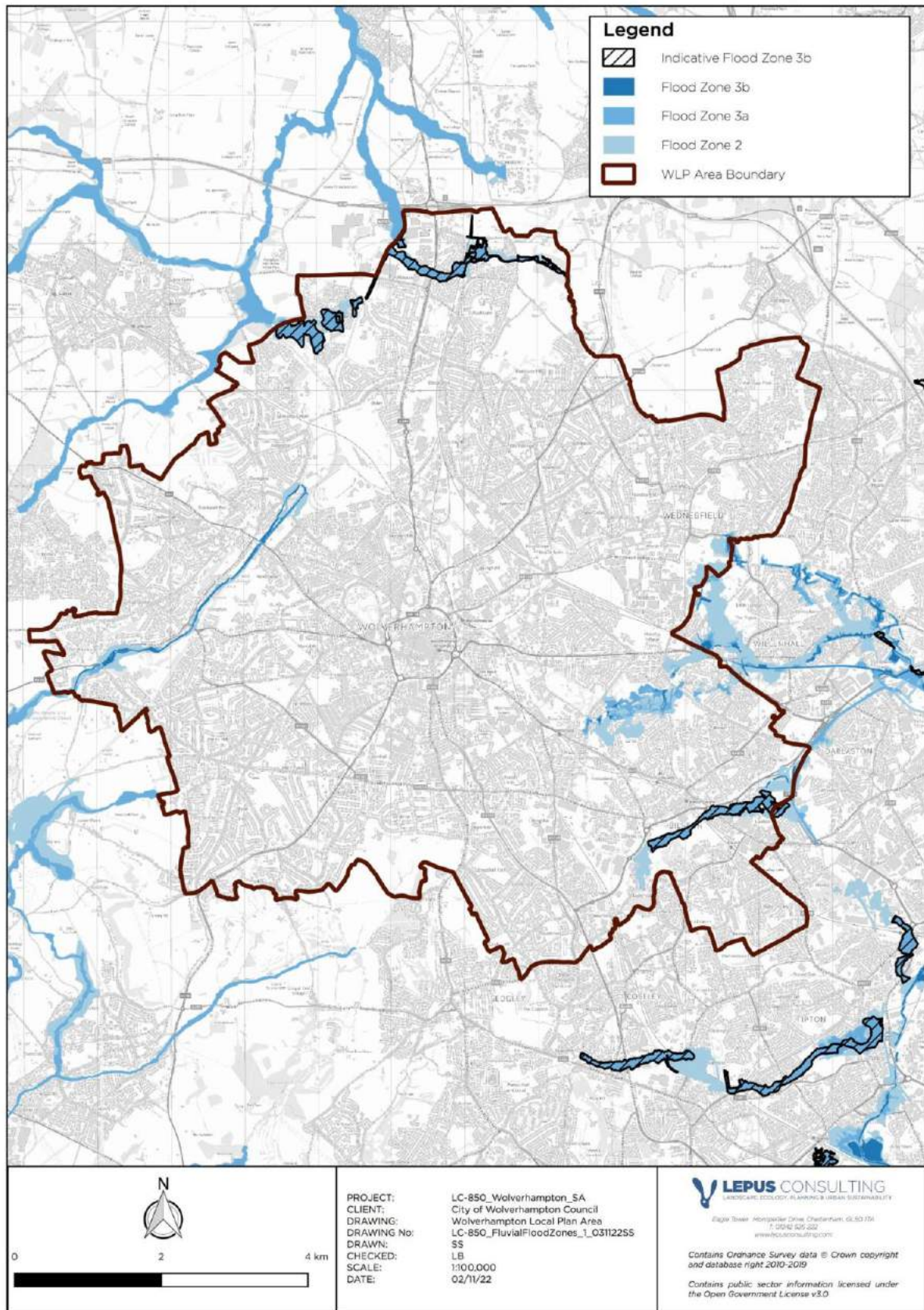


Figure 5.4: Fluvial Flood Zones and Indicative Flood Zone 3b within the WLP area (source: JBA Consulting and Environment Agency)

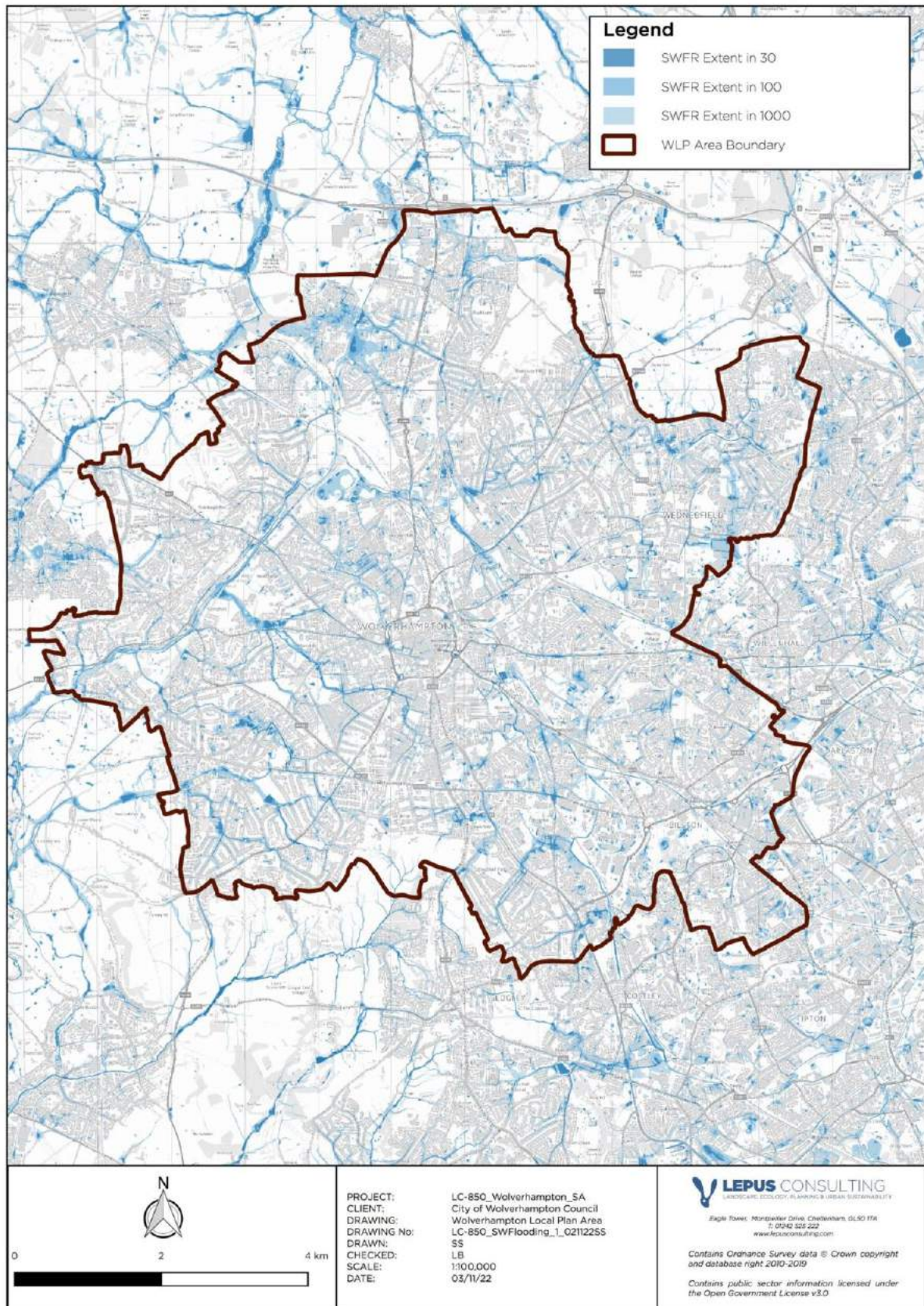


Figure 5.5: Extent of Surface Water Flood Risk in and around the WLP area (source: JBA Consulting and Environment Agency)

Green Infrastructure

- 5.2.21 Climate change has the potential to result in a range of environmental risks within the WLP area and nationally, such as those associated with increased heatwaves in the summer months and more frequent storm events in the winter. This can have knock-on implications across a range of receptors, such as for sewer capacity due to heavy rainfall, and biodiversity in terms of the habitat distribution of species sensitive to local conditions.
- 5.2.22 Wolverhampton's GI network, and the wider Black Country GI network, has an important role to play in reducing flood risk. It includes LNRs, SLINCs, SINCS, allotments, playing fields, parks, woodlands, agricultural land and margins, hedgerows, ridgelines, disused railways and canals. These green assets should be protected, maintained and enhanced, in order to safeguard the ecosystem services they provide, including the natural storage of flood water and slowing of surface water run-off rates.
- 5.2.23 Vegetation acts as a carbon sink, providing an important ecosystem service. GI is a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities⁸³. GI has many benefits including, human health, climate change adaptation and wildlife value⁸⁴. GI can play an important role in helping urban areas adapt to climate change, by filtering airborne pollutants, providing shade and local cooling and reducing surface water runoff⁸⁵. The water environment (such as canals, rivers and ponds) can also be referred to as Blue Infrastructure and often works alongside GI to provide multi-functional benefits including building resilience to climate change and acting as wildlife refuges and corridors.
- 5.2.24 The WLP area's GI network may include features such as LNRs, allotments, playing fields and parks. GI in the WLP area should be protected and increased where possible. Green corridors along rivers are a particularly effective natural source of flood attenuation and biodiversity value which should be protected.

5.3 Key Issues

- Flooding from main rivers is an issue across the WLP area. The highest flooding risk is flash flooding from excessive overland flow or overtopping of minor watercourses. Therefore, surface water run-off management in the WLP area is an important issue on all developments of any size, clearly highlighting the need for a sustainable drainage system (SUDS) that maximise source control measures.

⁸³ MHCLG (2021) National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 27/10/22]

⁸⁴ Forest Research (2010) Benefits of green infrastructure. Available at: <https://www.forestresearch.gov.uk/research/benefits-of-green-infrastructure/> [Date accessed: 27/10/22]

⁸⁵ Landscape Institute (no date) Green Infrastructure (GI). Available at: <https://www.landscapeinstitute.org/policy/green-infrastructure/> [Date accessed: 27/10/22]

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- Climate change has the potential to increase the risk of fluvial and surface water flooding.
 - A range of further risks linked to climate change may affect the WLP area. These include the following:
 - an increased incidence of heat related illnesses and deaths during the summer;
 - increased risk of injuries and deaths due to increased number of storm events and flooding;
 - adverse effect on water quality from watercourse levels and turbulent flow after heavy rain and a reduction of water flow;
 - a need to increase the capacity of sewers; loss of species that are at the edge of their southerly distribution and spread of species at the northern edge of their distribution;
 - an increased move by the insurance industry towards a more risk-based approach to insurance underwriting, leading to higher cost premiums for local business; and
 - increased drought and flood related problems such as soil shrinkages and subsidence.
 - GI should be enhanced and expanded. New development needs to incorporate energy efficiency measures and climate change adaptive features in order to respond to predicted levels of climate change.

6 Cultural Heritage

6.1 Introduction

- 6.1.1 Historic environment priorities from the international to the local level seek to address a range of issues, particularly in relation to the conservation and enhancement of heritage assets that are irreplaceable and play an important role in place making and the quality of life for local residents.
- 6.1.2 National and local guidance seeks to protect designated assets and their settings (such as Listed Buildings, Conservation Areas, Scheduled Monuments, and Registered Parks and Gardens); recognise the cultural aspects of landscape and establish mechanisms for their protection against inappropriate development; recognise the potential and actual value of unknown and undesignated assets; and conserve/enhance sites and landscapes of archaeological and heritage interest so that they may be enjoyed by both present and future generations.
- 6.1.3 Historic England advocate the seeking of opportunities alongside development for delivering heritage-led regeneration⁸⁶, creating a strong sense of place and local distinctiveness, encouraging the use of traditional building skills, and promoting climate change resilience and innovative reuse of historic buildings where appropriate⁸⁷.

6.2 Baseline data

Designated features

- 6.2.1 There are two Registered Parks and Gardens (RPG), four Scheduled Monuments (SM), 31 Conservation Areas (CA), two Grade I, 23 Grade II* and 351 Grade II Listed Buildings located within the Plan area. Listed Buildings within the WLP area are shown in **Figure 6.1**. SMs, RPGs and CAs in and around Wolverhampton are shown in **Figure 6.2**.
- 6.2.2 New Conservation Area Appraisals were prepared for existing CAs within Wolverhampton to support the BCP process. These Appraisals and the new CA boundaries have now been formally designated through Cabinet approval.

⁸⁶ Deloitte (2017) Heritage Works: A toolkit of best practice in heritage regeneration. Available at: <https://www.bpf.org.uk/sites/default/files/resources/Heritage-Works-14July2017-for-web.pdf> [Date accessed: 27/10/22]

⁸⁷ Historic England (2016) Sustainability Appraisal and Strategic Environmental Assessment – Historic England Advice Note 8. Available at: <https://historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/> [Date accessed: 27/10/22]

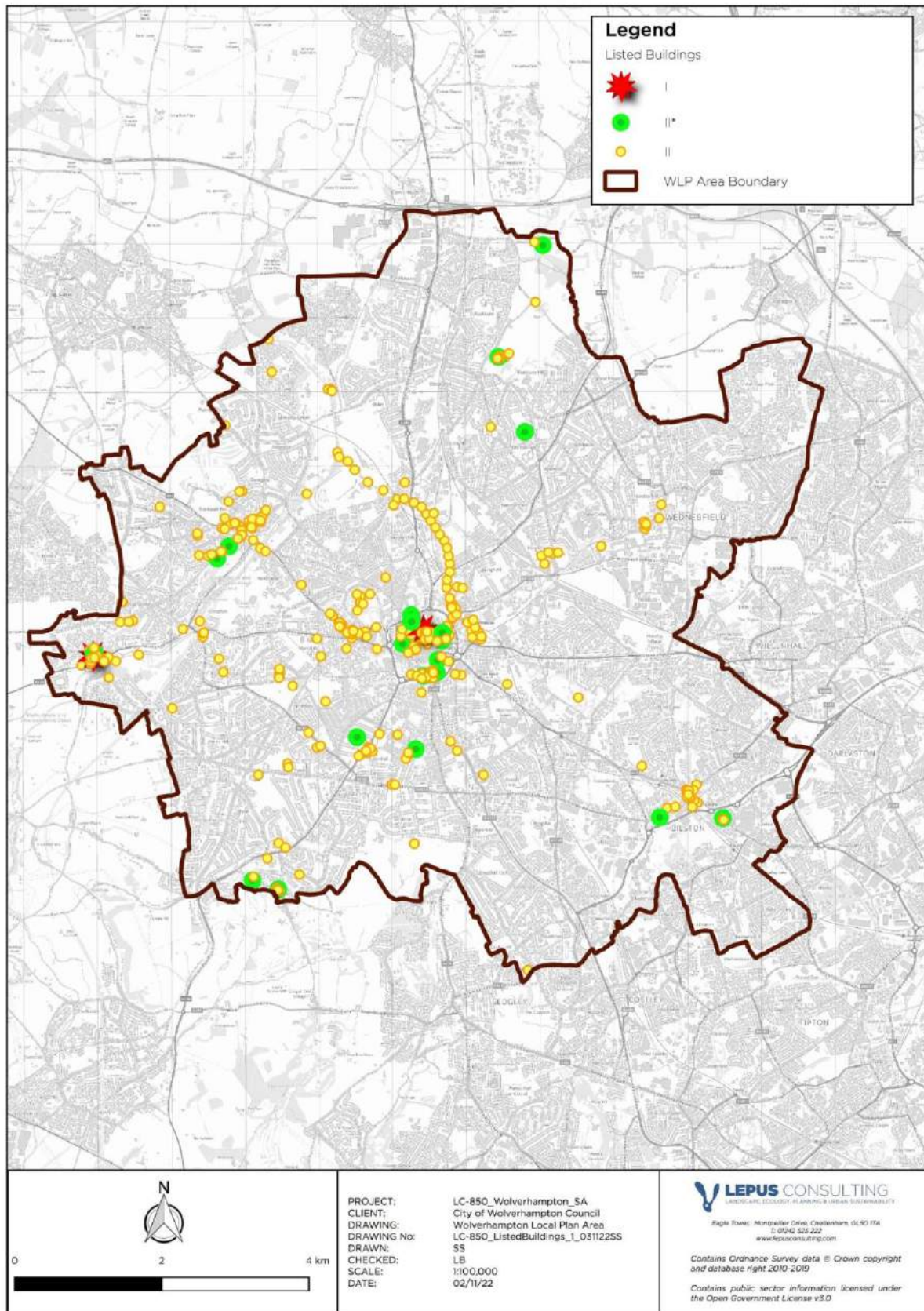


Figure 6.1: Listed Buildings in the WLP area (source: Historic England)

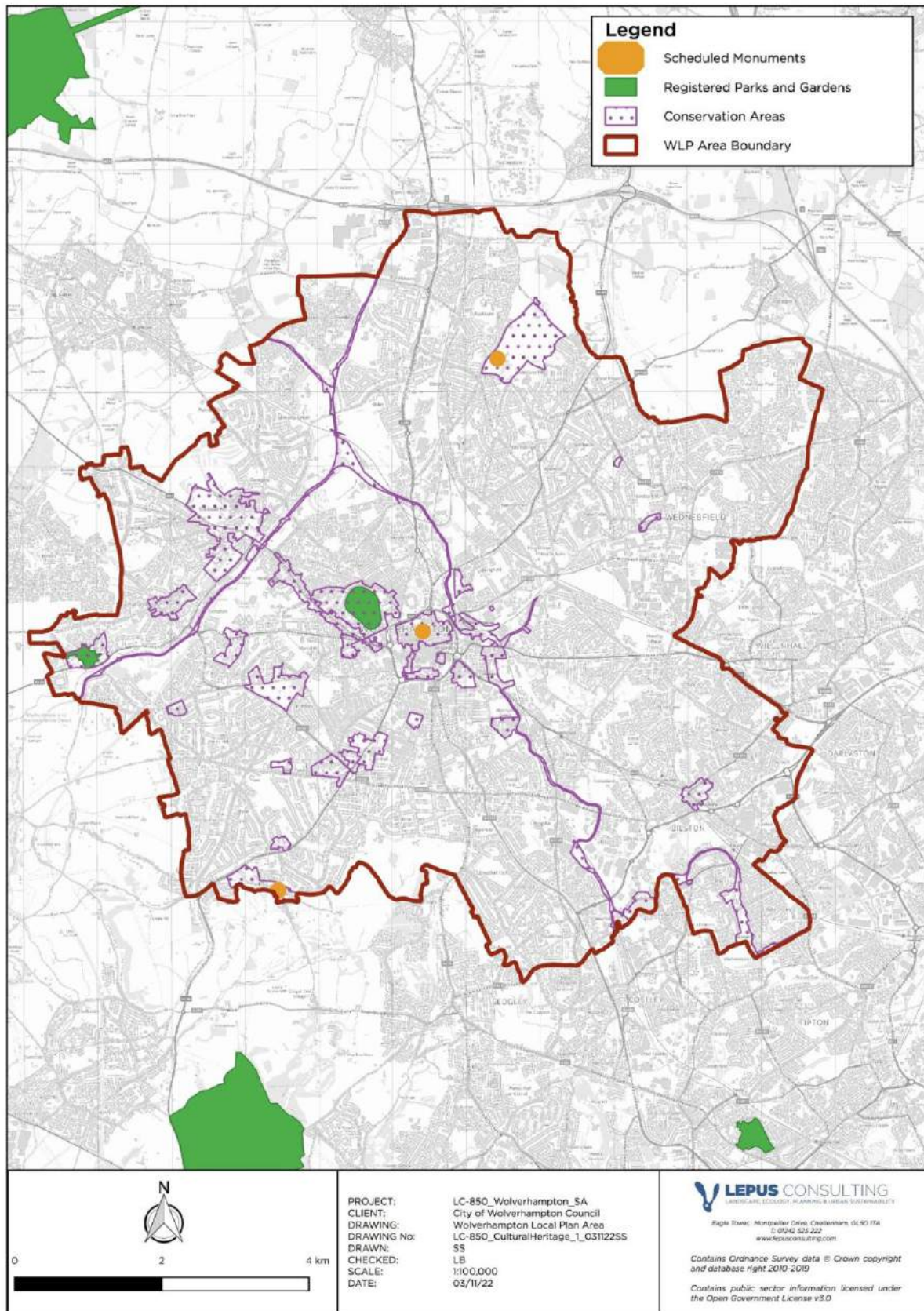


Figure 6.2: Cultural heritage features in and around the WLP area (source: Historic England)

- 6.2.3 Wolverhampton has a rich industrial history. Many of the Listed Buildings and other designated heritage assets within the Plan area are associated with the numerous warehouses, factories, and network of canals that were opened during the Industrial Revolution, as well as the main town centre of Wolverhampton.
- 6.2.4 Some of the historic assets include a late Saxon Cross in Wolverhampton. The city is also a medieval town which is estimated to have originated as a Mercian royal estate⁸⁸. There is evidence of Sunday market in Wolverhampton in 1180 and is estimated to have been approximately 22ha.
- 6.2.5 The Black Country Historic Landscape Characterisation (HLC) Study⁸⁹ aimed to create a strategic landscape-level understanding of the historic character and environment of the Black Country. The study identified several Historic Environment Area Designations (HEADs) within the Green Belt and in the urban area. The study also identified a number of Archaeological Priority Areas (APAs), which are considered to contain particularly rare or well-preserved remains of high archaeological and historic interest.
- 6.2.6 APAs are identified within the HLC as *"sites with a high potential for archaeological remains of regional or national significance that have not been considered for designation as scheduled monuments, or where there is insufficient data available about the state or preservation of any remains to justify a designation"*. The APAs have been identified using the 'Scheduled Monuments and nationally important but non-scheduled monuments'⁹⁰.
- 6.2.7 Areas of High Historic Townscape Value (AHHTVs) and Designed Landscapes of High Historic Value (DLHHVs) have also been identified within the HLC (see **Figure 6.3**). AHHTVs are areas *"where built heritage makes a significant contribution to the local character and distinctiveness"* and have been identified due to their sense of place, street plan and form, streetscape, views and setting, and representation. DLHHVs are *"designed landscapes that make an important contribution to local historic character but do not meet the criteria for inclusion on the national Register of Parks and Gardens"* and have been identified due to the date, preservation, aesthetics, and associations with people and past events.
- 6.2.8 Impacts on heritage assets will be largely determined by the specific layout and design of development proposals, as well as the nature and significance of the heritage asset. The level of the impact has been assessed based on the nature and significance of, and

⁸⁸ Black County History. Wolverhampton: Medieval Town. Available at: <https://www.blackcountryhistory.org/> [Date accessed: 02/04/20]

⁸⁹ Oxford Archaeology (2019) Black Country Historic Landscape Characterisation Study. Available at: https://blackcountryplan.dudley.gov.uk/media/13895/comp_black-country-hlc-final-report-30-10-2019-lr_redacted.pdf [Date accessed: 27/10/22]

⁹⁰ Historic England. Scheduled Monuments. Available at: <https://historicengland.org.uk/listing/what-is-designation/scheduled-monuments/> [Date accessed: 27/10/22]

proximity of the proposal to, the heritage asset in question. Additionally, where features identified on Historic England's Heritage at Risk Register⁹¹ could potentially be affected by the proposed development, this has been stated.

6.2.9 Adverse impacts on heritage assets can include direct loss or truncation of an asset, impacts on the existing setting of the asset and the character of the local area, as well as adverse impacts on views of, or from, the asset. These negative impacts are expected to be long-term and irreversible.

6.2.10 It is assumed that designated heritage assets will not be lost as a result of development, unless otherwise specified by the WLP. It is anticipated that the WLP will require a Heritage Statement or Archaeological Desk-Based Assessment to be prepared to accompany future planning applications, where appropriate. The Heritage Statement should describe the significance of any heritage assets affected by the proposals, including any contribution made by their settings.

Non-designated Features

6.2.11 It should be noted that not all of the WLP's historic environment resource and heritage assets are subject to statutory designations; non-designated features comprise a significant aspect of heritage, which is often experienced on a daily basis. This may include buildings and other features of historic interest which are not listed, as well as both discovered and undiscovered archaeological remains.

6.3 Key Issues

- Even though heritage assets will continue to benefit from legislative protection, development in the WLP area may have the potential to lead to effects on historic landscapes and cause direct damage to archaeological sites, monuments and buildings and / or their settings.
- Archaeological remains, both seen, and unseen have the potential to be affected by new development areas.

⁹¹ Historic England Heritage at Risk Register. Available at: <https://historicengland.org.uk/advice/heritage-at-risk/search-register> [Date accessed: 27/10/22]

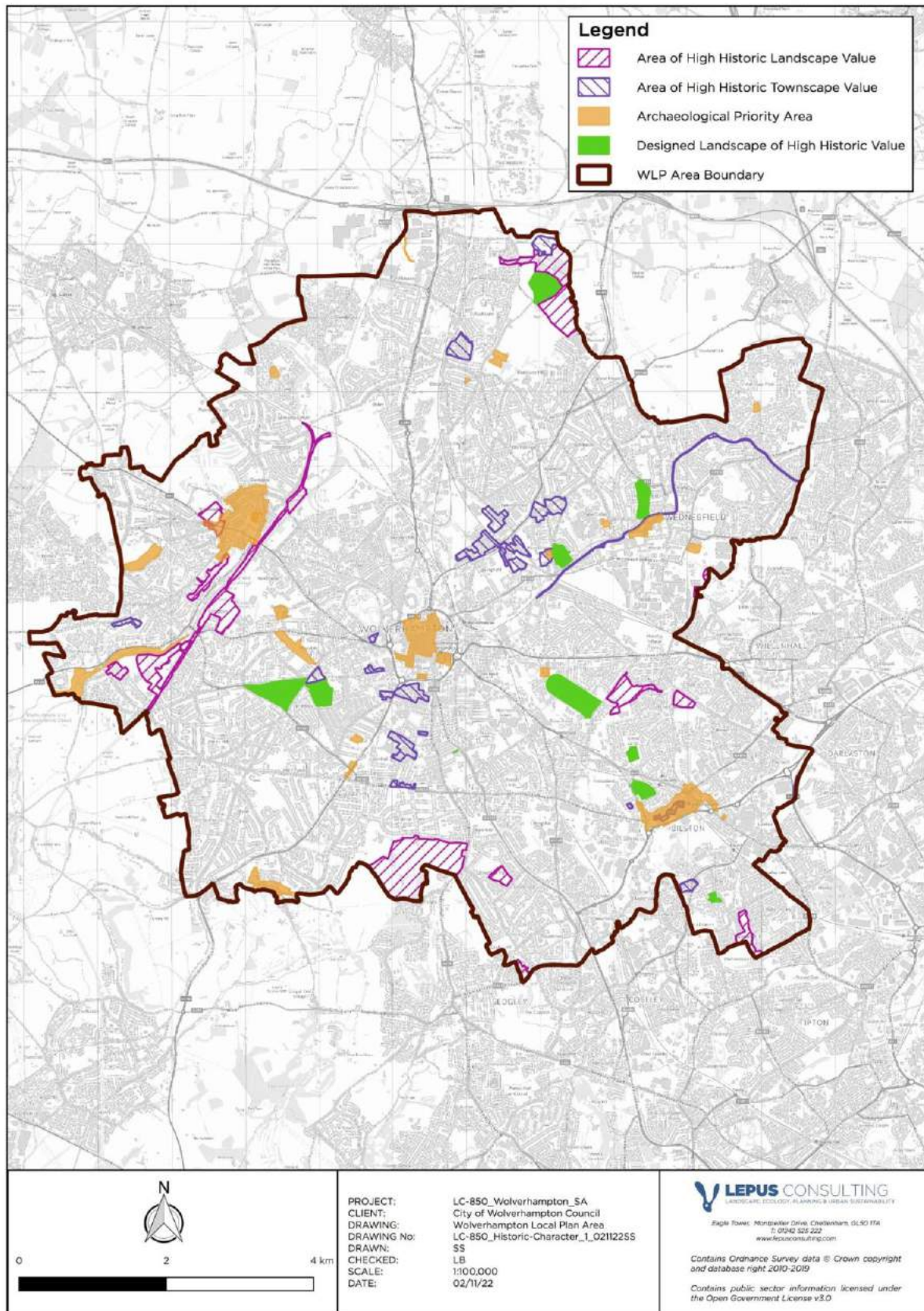


Figure 6.3: Historic Environment Area Designations in the WLP area (source: CWC)

7 Human Health

7.1 Introduction

- 7.1.1 National and local health strategies and policies seek to promote the development of healthy communities, such as through delivering age-friendly environments for the elderly, encouraging healthier food choices and facilitating active travel. In line with the NPPF, local planning authorities should seek to promote social interaction, create communities which are safe and accessible, and ensure there is good accessibility to a range of GI, sports facilities, local shops, cultural buildings and outdoor space.
- 7.1.2 Public Health England's Strategy for 2020 – 2025⁹² sets out priorities within the public health system and areas of focus including addressing health inequalities and narrowing the 'health gap' between poor and wealthy communities, reducing rates of infectious diseases, addressing unhealthy behaviours and ensuring the potential of new technologies is realised.
- 7.1.3 Furthermore, improving rates of infant mortality and life expectancy, reducing work related illness and accidents, increasing levels of sport and physical activity, improving accessibility to healthcare and leisure/ recreational facilities are also key priorities to address. At the local level, reports and strategies on GI provision and enhancement, sports facilities and open spaces should support this.
- 7.1.4 One of the most stark features of the Covid-19 pandemic has been the impact on particular communities and groups, including people from Black, Asian, and Minority Ethnic communities, people living in more deprived areas, elderly residents, those working in higher risk occupations, people living in overcrowded conditions and those with pre-existing health conditions⁹³.
- 7.1.5 The pandemic has also highlighted issues with health inequalities, in particular the lack of access to outdoor space in some housing situations and the greater risks in terms of both physical and mental wellbeing this presents.

⁹² Public Health England (2019) PHE Strategy 2020-25. Available at: <https://www.gov.uk/government/publications/phe-strategy-2020-to-2025> [Date accessed: 25/10/22]

⁹³ Public Health Annual Report 2020-21. Covid-19: Respond, Protect and Relight. Available at: <https://www.wolverhampton.gov.uk/sites/default/files/2021-08/Public-Health-Annual-Report-2020-21.pdf> [Date accessed: 28/10/22]

7.2 Baseline data

Air Pollution

- 7.2.1 As discussed in **Chapter 3**, the entirety of the WLP area is designated as AQMA⁹⁴. Development proposals located in close proximity to AQMAs or main roads would be likely to expose site end users to transport associated noise and air pollution, with adverse impacts on health and wellbeing. It is widely accepted that the effects of air pollution from road transport decreases with distance from the source of pollution. The Department for Transport (DfT) in their Transport Analysis Guidance (TAG) consider that, *"beyond 200m from the link centre, the contribution of vehicle emissions to local pollution levels is not significant"*⁹⁵. This statement is supported by Highways England and Natural England based on evidence presented in a number of research papers^{96 97}.
- 7.2.2 As all the proposed development within the WLP is located within an AQMA, this is likely to lead to adverse impacts on health and may prevent CWC from achieving air quality targets. It is assumed that new development proposals within Wolverhampton would also result in an increase in traffic and thus traffic-related air pollution. Both existing and future residents would be exposed to this change in air quality.

Healthcare Facilities

- 7.2.3 In order to facilitate healthy and active lifestyles for existing and new residents, it is expected that the WLP should seek to ensure that residents have good access to NHS hospitals and GP surgeries.
- 7.2.4 There is one NHS hospital with an A&E department located within Wolverhampton (New Cross Hospital) and a total of 61 healthcare centres. Ideally, residents should be within an approximate ten-minute walking distance to their nearest GP surgery, whilst a hospital within 5km would be considered a sustainable distance. **Figure 7.1** shows the proportion of Wolverhampton within a sustainable 15-minute walking distance or travel time via public transport to a GP surgery. **Figure 7.2** shows the location of NHS hospitals with respect to Wolverhampton; the eastern WLP area also falls within the 5km target distance of Manor Hospital, located in the adjacent district of Walsall.

⁹⁴ Black Country Air Quality Supplementary Planning Document (SPD) September 2016. Available at: <https://www.dudley.gov.uk/media/6381/adopted-black-country-air-quality-spd-september-2016.pdf> [Date accessed: 27/10/22]

⁹⁵ Department for Transport (2022) TAG unit A3 Environmental Impact Appraisal. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/825064/tag-unit-a3-environmental-impact-appraisal.pdf [Date accessed: 27/10/22]

⁹⁶ Bignal, K., Ashmore, M & Power, S. (2004) The ecological effects of diffuse air pollution from road transport. English Nature Research Report No. 580, Peterborough.

⁹⁷ Ricardo-AEA (2016) The ecological effects of air pollution from road transport: an updated review. Natural England Commissioned Report No. 199.

7.2.5 At this stage, there is not sufficient information available to accurately predict the effect of new development on the capacity of these health facilities.

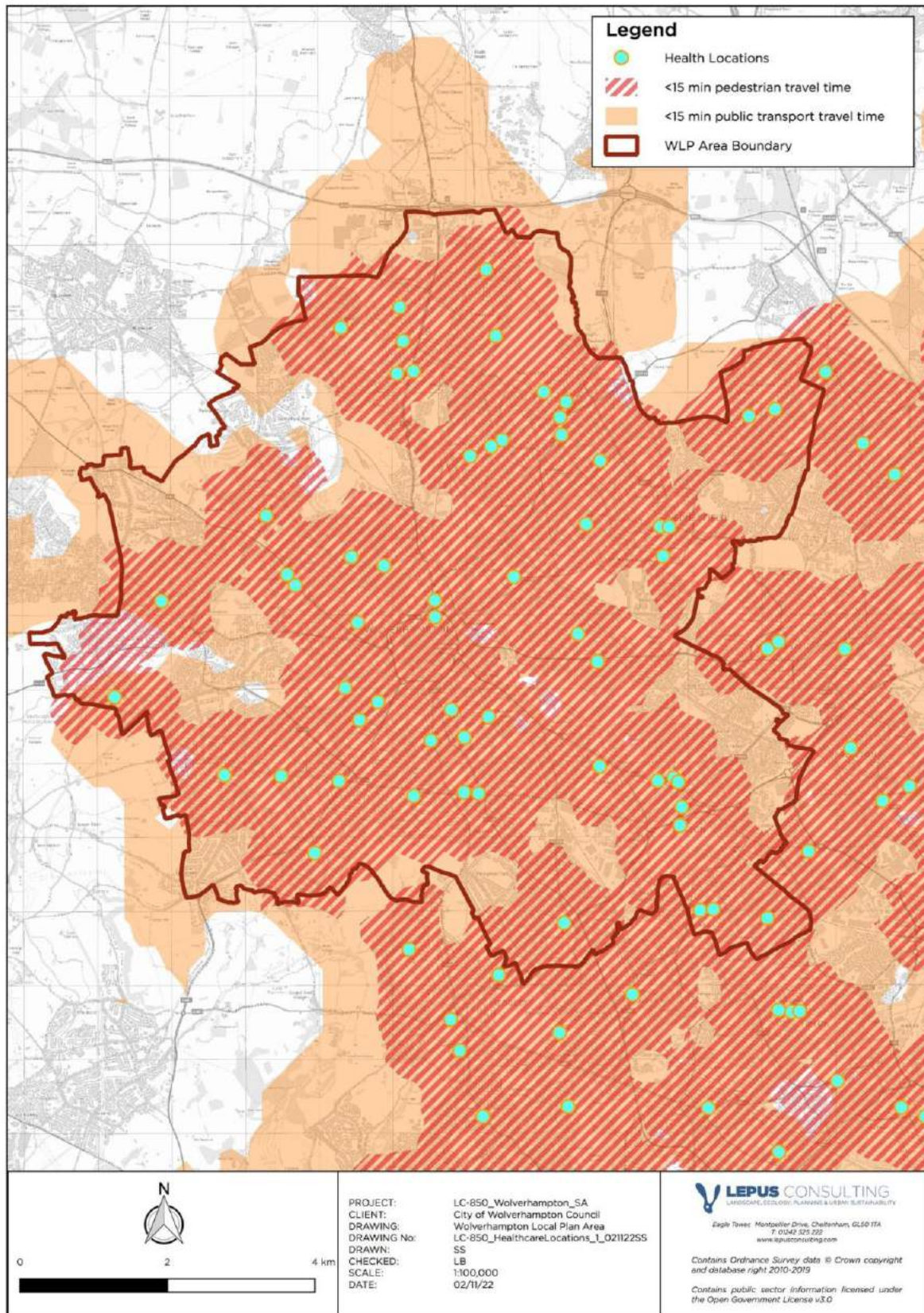


Figure 7.1: Location of healthcare facilities and modelled travel time across Wolverhampton (source: CWC)

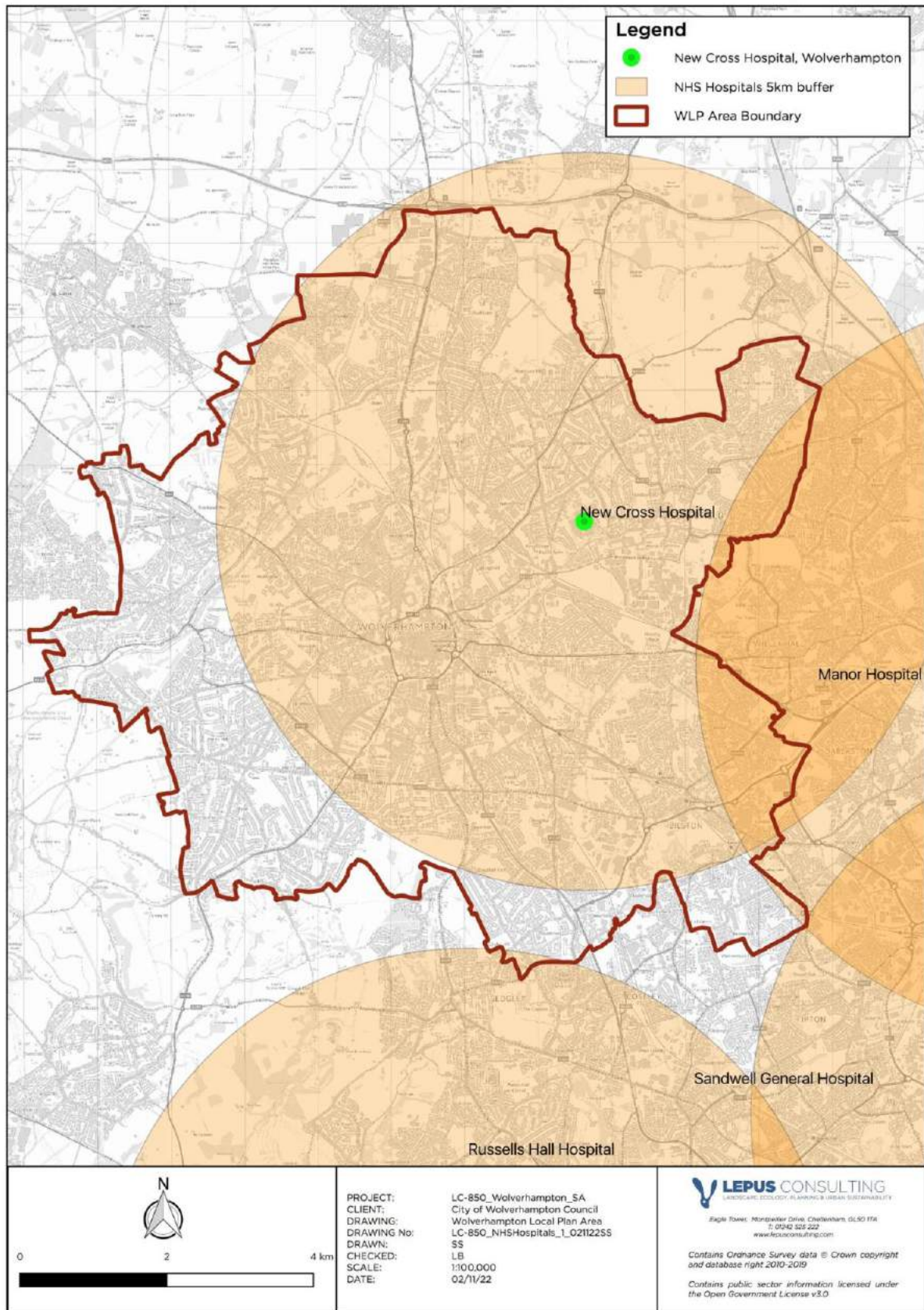


Figure 7.2: NHS Hospitals with an A&E department in and around Wolverhampton (source: NHS)

Health and Wellbeing

- 7.2.6 Estimates of personal wellbeing in the UK are published by the ONS annually, with scores for anxiety, happiness, life satisfaction, and feeling that life is worthwhile. Overall scores are based on surveying a representative sample of the population and are scored out of 10 (.e.g for happiness 0 is 'not at all happy' and 10 is 'completely happy')⁹⁸.
- 7.2.7 Levels of reported anxiety in Wolverhampton were 2.4 in 2012 and 2.8 in 2021. In the rest of England levels of anxiety are currently 3.1. Reported levels of happiness in 2021 were 7.3, and 6.7 in 2012. In England, the average happiness indicator is currently 7.5. Of the 363 areas in England, Wolverhampton is the 322nd happiest area in England. Life satisfaction scores for 2021 are 7.5 and were 6.7 in 2012. For the feeling that things done in life are worthwhile the 2021 level is 7.7 and was 7.2 in 2012⁹⁹.

Green spaces and natural habitats

- 7.2.8 Opportunities to experience a diverse range of natural habitats is beneficial for physical and mental health and well-being. Good access to green/recreational areas can reduce stress, fatigue, anxiety and depression¹⁰⁰. Good access to green spaces is associated with healthy foetal growth in pregnant women, higher birth weights, healthy microbiomes in babies and reduced rates of obesity and type 2 diabetes. Impacts of access to the natural environment are particularly significant for lower socio-economic groups.
- 7.2.9 Providing residents with sustainable access to a diverse range of natural habitats is an effective means of reducing health inequalities in the area. Within the WLP area, there is a rich and diverse range of public open spaces, formal parks, outdoor recreational spaces, as well as the PRoW network and the canal system. There are also several Country Parks surrounding the plan area. All these open spaces positively contribute towards the health and wellbeing of residents, by helping to encourage physical exercise through sports, recreation and active travel. The recreational green spaces combined with the natural green space network would also benefit the mental health and wellbeing of residents.
- 7.2.10 The WLP area supports a network of biodiversity sites, providing local residents with opportunities to visit natural outdoor spaces and view wildlife. This includes LNRs and LWSs (see **Chapter 4**). In addition to this, there are a variety of open space and recreational facilities: West Park, Northycote Farm, Country Park, WV Active Aldersley, Bilson-Bert Williams, WV Active Central and Wolverhampton Swimming and Fitness Centre.

⁹⁸ Demographics of Wolverhampton. Available at: <https://www.varbes.com/demographics/wolverhampton-demographics> [Date accessed: 31/10/22]

⁹⁹ Demographics of Wolverhampton. Available at: <https://www.varbes.com/demographics/wolverhampton-demographics> [Date accessed: 31/10/22]

¹⁰⁰ Houlden. V., Weich. S. and Jarvis. S. (2017) A cross-sectional analysis of green space prevalence and mental wellbeing in England

7.3 Key Issues

- As all the proposed development within the WLP is located within an AQMA, this is likely to lead to adverse impacts on health, without intervention.
- The increasing population in the City of Wolverhampton could have place pressure on the capacity of health infrastructure and leisure facilities.
- The life expectancy of men and women is anticipated to rise over time, in line with national trends, leading to a greater proportion of older residents with specific needs for housing and services.

8 Landscape and Townscape

8.1 Introduction

- 8.1.1 At the European, national, regional and local levels emphasis is placed on the protection of landscape as an essential component of people's surroundings and sense of place. Landscape is described as comprising natural, cultural, social, aesthetic and perceptual elements. This includes flora, fauna, soils, land use, settlement, sight, smells and sound¹⁰¹.
- 8.1.2 The PPPs seek to increase recognition of the linkages and interplay between the different aspects and roles of landscape, including local distinctiveness; the historic environment; natural resources; farming, forestry and food; education, leisure and recreation opportunities; transport and infrastructure; settlements and nature conservation.
- 8.1.3 The link between landscapes and a range of other aspects can be provided with a close focus on GI provision, with multi-functional benefits. In this respect policies advocate the provision of open space, green networks and woodland as opportunities for sport and recreation, creating healthier communities as well as supporting and enhancing biodiversity. National Design Guidance¹⁰² advocates well-designed places that are functional, attractive and provide a sense of safety, inclusion and community cohesion.

8.2 Baseline data

National Character Areas

- 8.2.1 Natural England has divided England into 159 distinct natural areas called National Character Areas (NCAs)¹⁰³. Each is defined by a unique combination of landscape, biodiversity, geodiversity, history and cultural and economic activity. Their boundaries follow natural lines in the landscape.

¹⁰¹ Natural England (2014) An Approach to Landscape Character Assessment. Available at: <https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types> [Date accessed: 28/10/22]

¹⁰² Ministry of Housing, Communities & Local Government (2021) National Design Guide: Planning practice guidance for beautiful, enduring and successful places. Available at: <https://www.gov.uk/government/publications/national-design-guide> [Date accessed: 28/10/22]

¹⁰³ Natural England (2022) National Character Area Profiles. Available at: <https://nationalcharacterareas.co.uk/> [Date accessed: 28/10/22]

8.2.2 The WLP area coincides with two NCAs (see **Figure 8.1**): Cannock Chase and Cank Wood on the east and Mid Severn Sandstone Plateau on the west. 'Cannock Chase and Cank Wood' ranges from the open heathlands and plantations associated with the AONB to dense urban areas, whereas 'Mid Severn Sandstone Plateau' are with open arable fields and steep wooded gorges in the Severn Valley.

8.2.3 Key characteristics of the Mid Severn Sandstone Plateau NCA includes:

- extensive sandstone plateau with tree lined ridges in the core and east;
- irregular topography and steep, wooded gorges of the Severn Valley in the west; and
- large, open arable fields with a weak hedgerow pattern on the plateau¹⁰⁴.

8.2.4 Key characteristics of the Cannock Chase and Cank Wood NCA includes:

- a varied landscape ranging from the open heathlands and plantations of Cannock Chase, through towns, reclaimed mining sites and new developments, to dense urban areas; and
- extensive coniferous plantations, woodlands and historic parklands occur across the NCA¹⁰⁵.

¹⁰⁴ Natural England (2013) NCA Profile: 66 Mid Severn Sandstone Plateau (NE472). Available at: <http://publications.naturalengland.org.uk/publication/5001578805198848?category=587130> [Date accessed: 28/10/22]

¹⁰⁵ Natural England (2012) NCA Profile: 67 Cannock Chase and Cank Wood (NE347). Available at: <http://publications.naturalengland.org.uk/publication/2431343?category=587130> [Date accessed: 28/10/22]

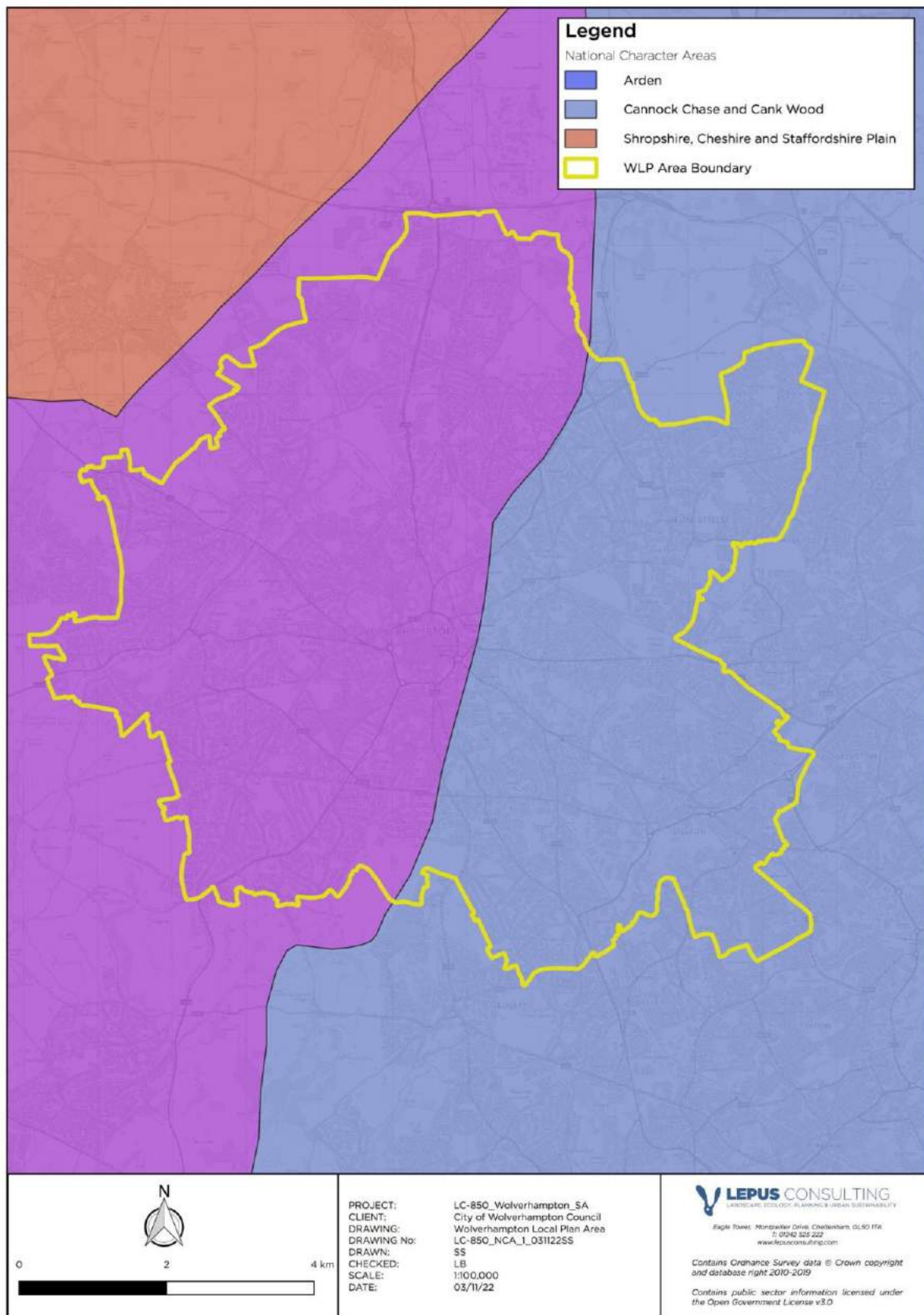


Figure 8.1: National Character Areas within Wolverhampton (source: Natural England)

Cannock Chase Area of Outstanding Natural Beauty (AONB)

8.2.5 Cannock Chase AONB is a nationally designated landscape, located approximately 7km to the north of the Plan area at its closest point. Whilst new development in the WLP could potentially lead to adverse impacts on the AONB, such as through increased visitor pressures, it is not anticipated that there would be any adverse visual impacts on the AONB as a result of development proposed within the WLP, due to the distance from the development to the AONB.

Green Belt

8.2.6 The WLP area is heavily urbanised, but also contains some areas within the Black Country Green Belt (see **Figure 8.2**). The Black Country Green Belt forms part of the West Midlands Green Belt, surrounding the West Midlands Conurbation. Although Green Belt itself is not necessarily of high landscape value, it often serves to protect the character and setting of historic towns and support landscape-scale biodiversity networks. New development could potentially increase noise and light pollution and reduce the perception of tranquillity in some areas.

8.2.7 Whilst the Green Belt is not a statutory landscape designation, it is a significant element of landscape protection in the area. The Green Belt is intended to¹⁰⁶:

- check the unrestricted sprawl of larger built-up areas;
- prevent neighbouring towns from merging into one another;
- assist in safeguarding the countryside from encroachment;
- preserve the setting and special character of historic towns; and
- assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

¹⁰⁶ NPPF (2019) Chapter 13: Protecting Green Belt land. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf [Date accessed: 28/10/22]

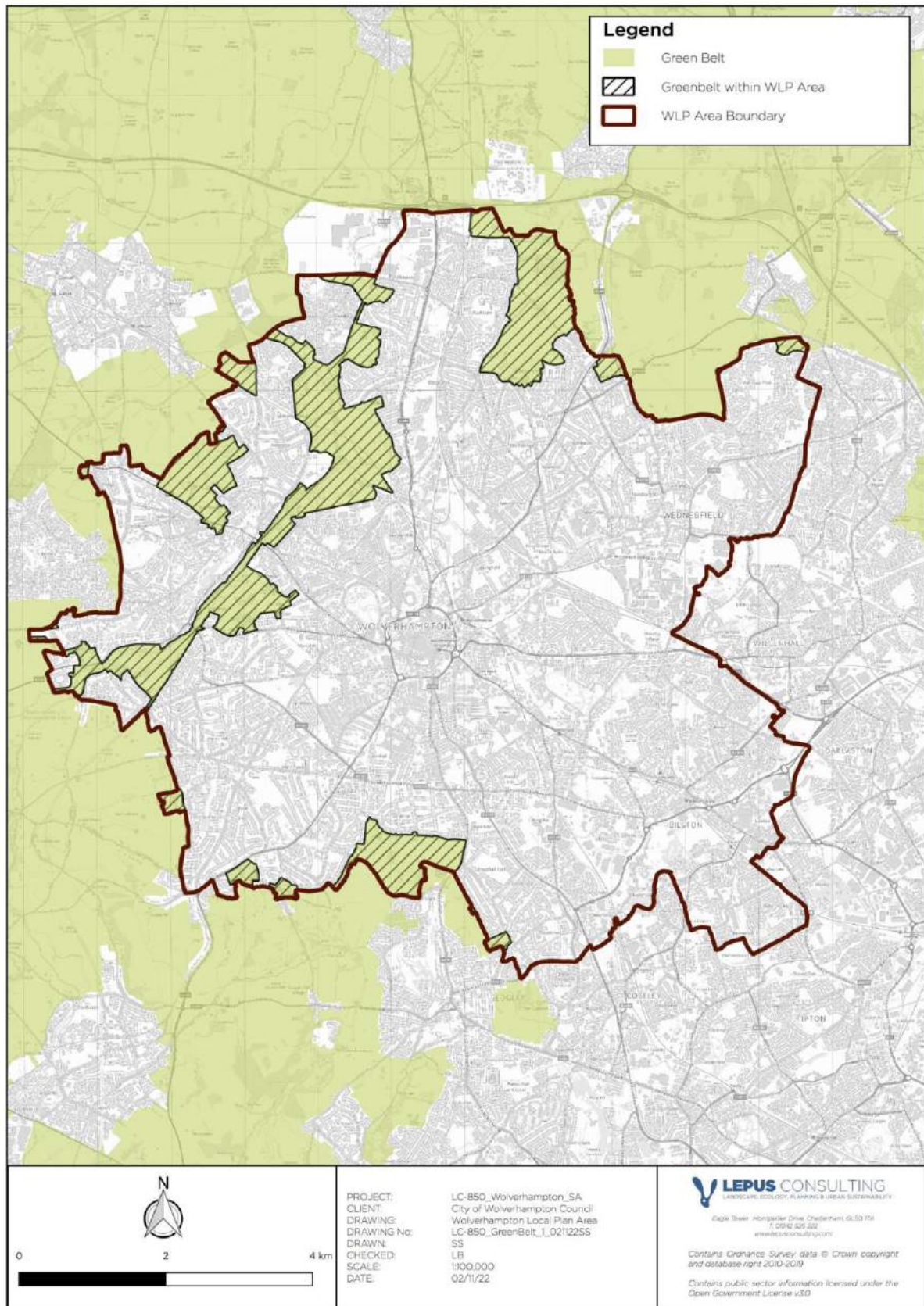


Figure 8.2: Green Belt in and around the WLP area (source: CWC)

8.2.8 Due to the Wolverhampton's highly urbanised nature, this means that the identified housing requirement for the Plan period cannot be met with development only within the existing urban areas. As such, appropriate areas of the Green Belt which can support a limited amount of development will be identified through using the findings of the Green Belt Study¹⁰⁷.

8.2.9 The Green Belt Study, carried out by LUC, classified parcels of Green Belt land into different 'harm' ratings, based on the assessment of potential harm caused by removing each parcel from the Green Belt based on a range of criteria. A summary of the harm ratings around Wolverhampton is presented in **Figure 8.3**.

Landscape character and sensitivity

8.2.10 The Black Country Landscape Sensitivity Assessment¹⁰⁸ assessed the sensitivity of Green Belt land to housing and commercial development. The aim of the study was to identify the extent to which the character and quality of Green Belt land is susceptible to change as a result of future development.

8.2.11 A summary of the Landscape Sensitivity Assessment findings for the Wolverhampton area is presented in **Figure 8.4**, showing parcels of Green Belt land ranging from 'high' to 'low' sensitivity.

8.2.12 It should be noted that although there is a relationship between the Landscape Sensitivity Assessment and the Green Belt Harm Assessment, the Green Belt Study states that "*there are fundamental distinctions in the purposes of the two assessments, reflecting the fact that landscape quality is not a relevant factor in determining the contribution to Green Belt purposes, or harm to those purposes resulting from the release of land*".

¹⁰⁷ LUC (2019) Black Country Green Belt Study. Available at: https://blackcountryplan.dudley.gov.uk/media/13882/bcgb-0919-black-country-gb-stage-1-and-2-plus-app1-final-reduced_redacted.pdf [Date accessed: 28/10/22]

¹⁰⁸ LUC (2019) Black Country Landscape Sensitivity Assessment. Available at: https://blackcountryplan.dudley.gov.uk/media/13883/black-country-lsa-front-end-report-final-lr_redacted.pdf [Date accessed: 28/10/22]

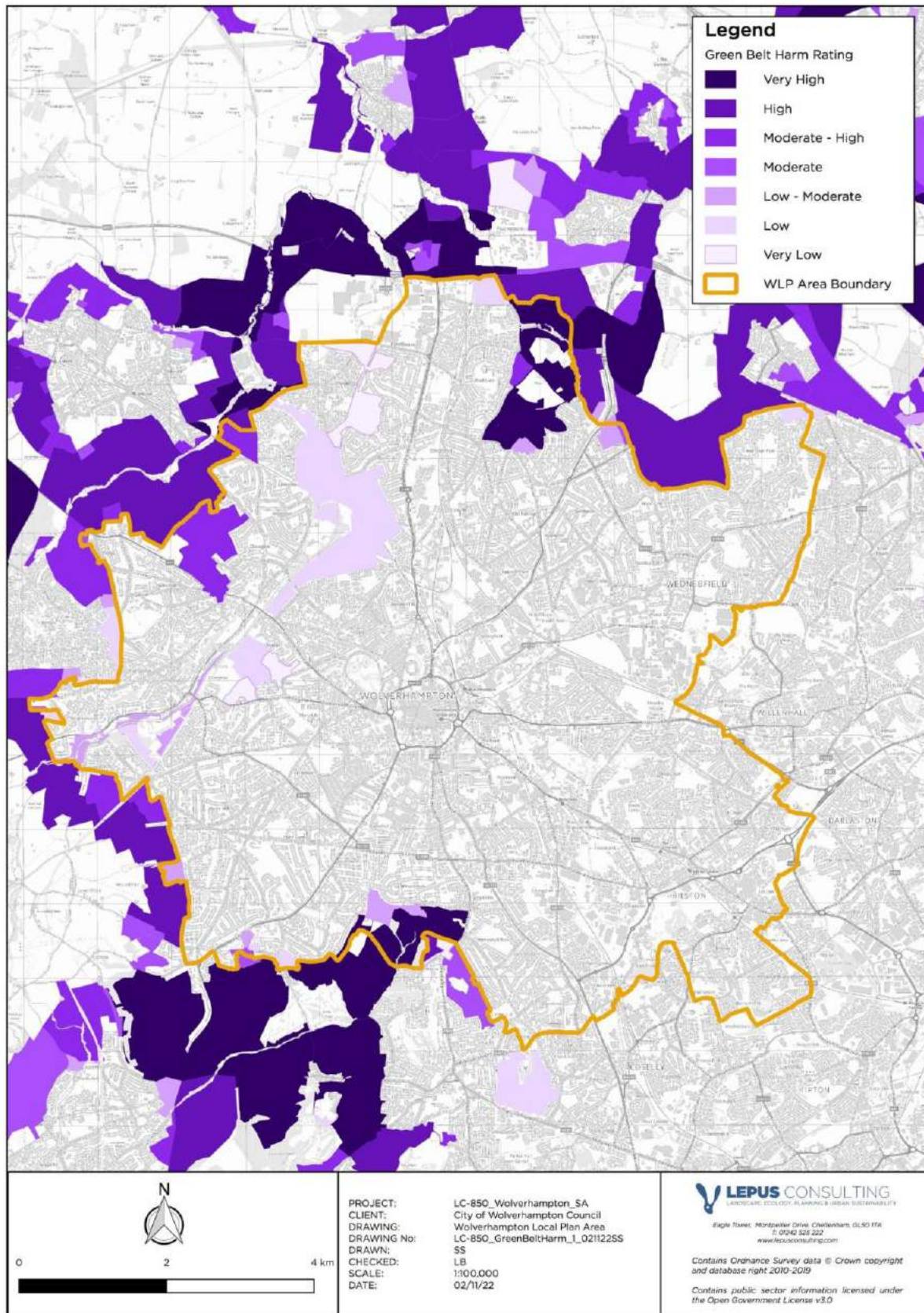


Figure 8.3: Green Belt Harm Rating in and around the WLP area (source: LUC)

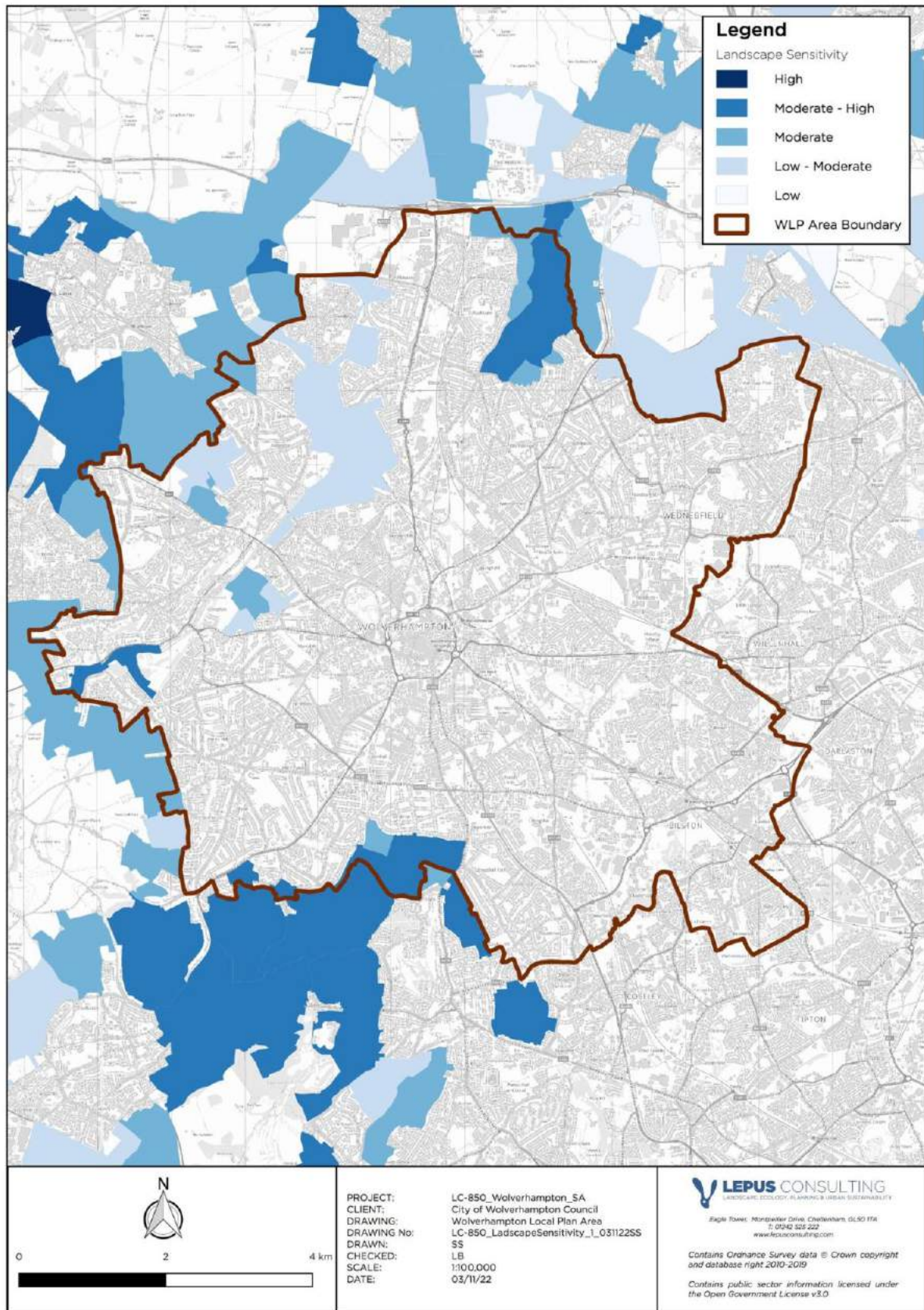


Figure 8.4: Landscape Sensitivity within and around the WLP area (source: LUC)

Tranquillity

8.2.13 New employment, residential and retail growth can have significant effects on landscape quality, including through impacts of noise pollution, light pollution and broader effects on people's perceptions of tranquillity.

8.2.14 **Figure 8.5** presents a map of tranquillity in the West Midlands. This map shows that the Black Country (located in the far west of the West Midlands) is amongst the least tranquil areas of the region.

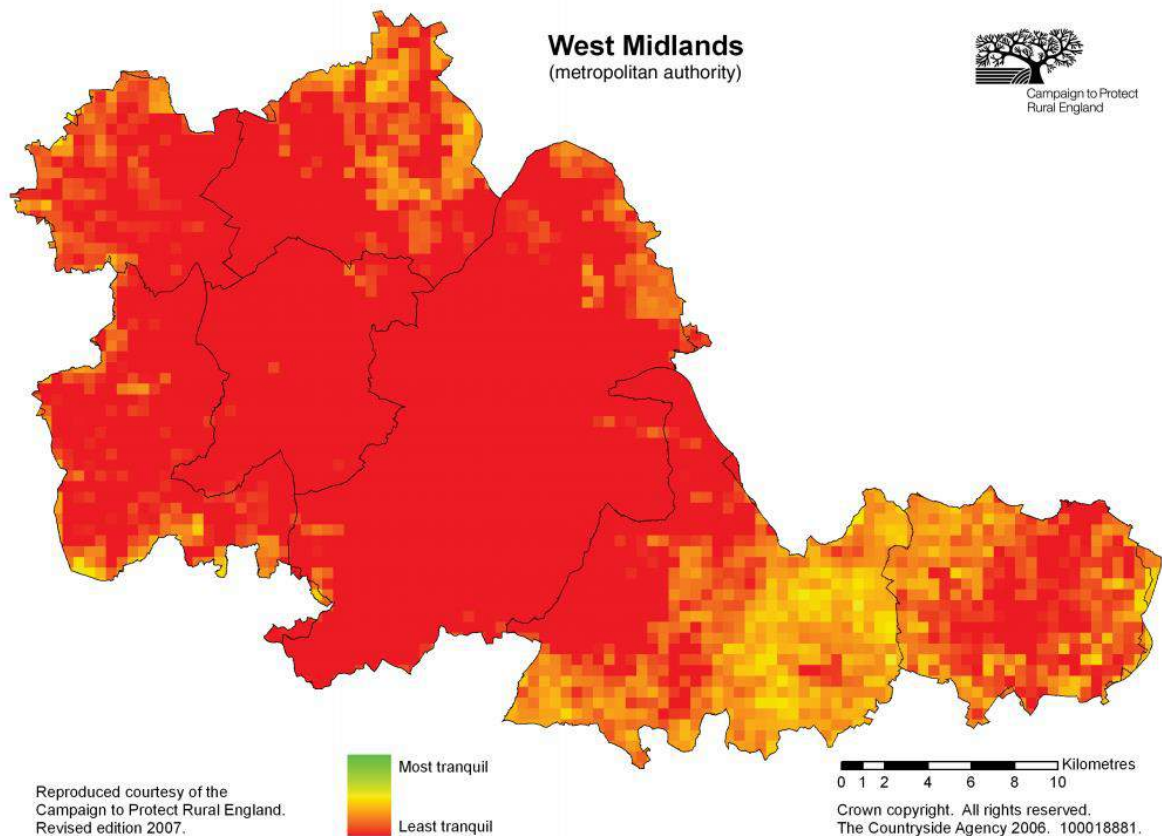


Figure 8.5: *Tranquillity in the West Midlands*¹⁰⁹

8.3 Key Issues

- Parts of Wolverhampton lie within the West Midlands Green Belt.
- The WLP area is amongst the least tranquil areas of the West Midlands.

¹⁰⁹ CPRE (2007) Tranquillity Map: West Midlands (metropolitan authorities).

<https://www.cpre.org.uk/resources/developing-an-intrusion-map-of-england/> [Date accessed: 28/10/22]

9 Population and Material assets

9.1 Introduction

- 9.1.1 The consideration of 'Population' is a broad matter and includes topics such as: Pollution and waste, housing, transport and accessibility, education, economy and employment. The population topic seeks to create places where residents live a high quality of life for longer, are well educated and have the necessary skills to gain employment and succeed in modern society. Indicators of these objectives include the proximity of development proposals to schools, accessibility to employment land and proximity to services and amenities.
- 9.1.2 'Material assets' covers a variety of built and natural assets which are accounted for in a range of topics. It is a requirement of Schedule 2 of the SEA Regulations to consider material assets, although the Regulations does not define them. The SA process considers material assets as the social, physical and environmental infrastructure implications of the Local Plan.
- 9.1.3 PPPs on population cover a range of different objectives, including tackling social exclusion; improving human rights and public participation; improving health; and ensuring every child has the chance to fulfil their potential by reducing levels of education failure, ill health, substance misuse, crime and anti-social behaviour. At the regional and local levels, support for cultural diversity and young people are key aims.
- 9.1.4 A wide range of objectives exist within policies and plans from the European to local level with regards to quality of life. In particular, these focus on improving social progress and social inclusion; reducing poverty; improving housing quality; preventing crime, anti-social behaviour and truancy; improving skill levels and employability; and regenerating communities.
- 9.1.5 The material assets sustainability theme covers a range of policy areas, including waste management, minerals, energy production and previously developed land.
- 9.1.6 National level PPPs seek to the protect minerals resources and promote appropriate after uses for minerals workings. PPPs at all levels seek to promote the 'waste hierarchy'. The waste hierarchy seeks to prioritise waste management in the following order: reduction; reuse; recycling and composting; energy recovery; and disposal. National and regional PPPs also support the use of previously developed land.

9.1.7 An expansion of renewable energy production is strongly promoted by European and national PPPs. Under EU Directive 2001/77/EC, member states were jointly required to achieve 22% of electricity production from renewable energies by 2010; with a UK-specific target of 10%. This has been reinforced by the UK's recent Renewable Energy Strategy, which seeks to produce 15% of electricity from renewable sources by 2020.

9.2 Baseline Information

Population Size and Age Structure

9.2.1 In Wolverhampton, the population size has increased by 5.7%, from around 250,000 in 2011 to 264,300 in 2021 (see **Table 9.1**). This is lower than the overall increase for England (6.6%), where the population grew by nearly 3.5 million to 56,489,800. At 5.7%, Wolverhampton's population increase is slightly lower than the increase for the West Midlands (6.2%)¹¹⁰.

9.2.2 In 2021, Wolverhampton ranked 64th for total population out of 309 local authority areas in England, which is a fall of two places in a decade. As of 2021, Wolverhampton is the third most densely populated of the West Midlands' 30 local authority areas¹¹¹.

Table 9.1: The City of Wolverhampton- Total Resident Population (2010-2021)¹¹²

Year	Wolverhampton (Numbers)	West Midlands (Numbers)	Great Britain (Numbers)
2010	247,600	5,565,900	60,954,600
2011	249,900	5,608,700	61,470,800
2012	251,400	5,640,300	61,881,400
2013	252,400	5,676,900	62,275,900
2014	254,400	5,716,900	62,756,300
2015	256,100	5,756,300	63,258,400
2016	258,300	5,812,200	63,785,900
2017	260,600	5,855,100	64,169,400
2018	262,500	5,889,300	64,553,900
2019	263,500	5,921,000	64,903,100
2020	263,100	5,931,900	65,185,700
2021	264,300	5,956,200	65,121,700

9.2.3 Overall, in England, there has been an increase of 20.1% in people aged 65 years and over, an increase of 3.6% in people aged 15 to 64 years, and an increase of 5.0% in

¹¹⁰ Office of National Statistics. Census 2021. Available at: <https://www.ons.gov.uk/visualisations/censuspopulationchange/E08000031/> [Date accessed: 31/10/22]

¹¹¹ Office of National Statistics. Census 2021. Available at: <https://www.ons.gov.uk/visualisations/censuspopulationchange/E08000031/> [Date accessed: 31/10/22]

¹¹² NOMIS official Labour Market Statistics. All people population Wolverhampton. Available at: https://www.nomisweb.co.uk/reports/lmp/la/1946157192/subreports/pop_time_series/printable.aspx?&allInGB=&pivot=total&sort=&ascending= [Date accessed: 31/10/22]

children aged under 15 years. There has been an increase of 6.6% in people aged 65 years and over, an increase of 3.7% in people aged 15 to 64 years, and an increase of 12.5% in children aged under 15 years.

Equality

9.2.4 The WLP area is an ethnically diverse area, with individuals from many different religions, cultures, communities and backgrounds. According to the 2011 Census, it has a growing population from Black and Minority Ethnic (BAME) communities. Many faiths are followed in the city and has the second-highest proportion of Sikh residents in England¹¹³. In Wolverhampton:

- 35.5% of the population are from BAME communities;
- 20.5% of the City population have some form of disability;
- 16% of the diverse population were born outside the UK; and
- 3,248 residents aged 16+ estimated to be Lesbian, Gay or Bisexual.

9.2.5 The Equality Act 2010¹¹⁴ provides a legal framework to protect individuals from unfair treatment and promotes a fair and equal society. It seeks to highlight and strengthen the laws which prevent discrimination. Under the Equality Act, there are nine protected characteristics:

- Age;
- Disability;
- Gender reassignment;
- Marriage and civil partnership;
- Pregnancy and maternity;
- Race;
- Religion or belief;
- Sex; and
- Sexual orientation.

9.2.6 The Equality Act focuses of four main types of discrimination: direct discrimination; indirect discrimination; harassment; and victimisation.

9.2.7 Furthermore, the WLP area is home to a people from a range of socio-economic status who may also experience discrimination, poverty and social exclusion. Child poverty levels are relatively high. In the West Midlands, 22.7% of children are from low-income families¹¹⁵.

¹¹³ City of Wolverhampton Council. Wolverhampton in Profile. <https://www.wolverhampton.gov.uk/your-council/equality-diversity-inclusion/wolverhampton-profile> [Date accessed: 31/10/22]

¹¹⁴ Equality Act 2010. Available at: <http://www.legislation.gov.uk/ukpga/2010/15/contents> [Date accessed: 31/10/22]

¹¹⁵ Department for Work and Pensions (2022) Households below average income (HBAI) statistics. Available at: <https://www.gov.uk/government/collections/households-below-average-income-hbai--2> [Date accessed: 01/11/22]

Indices of Multiple Deprivation

- 9.2.8 The Index of Multiple Deprivation (IMD) measures the relative levels of deprivation in 32,844 Lower Super Output Areas (LSOAs) in England¹¹⁶. LSOAs are small areas designed to be of similar population, of approximately 1,500 residents or 650 households. In general, deprivation is spread across England, with approximately 61% of local authority districts contain at least one of the most deprived neighbourhoods in England.
- 9.2.9 IMD follows an established methodology which broadly defines deprivation to encompass a range of an individual's living conditions. The calculation is based on 39 indicators separated into seven distinct domains which are combined and weighted to calculate IMD. The seven domains are: income; employment; health deprivation and disability; education, skills and training; crime; barriers to housing and services; and living environment. All neighbourhoods, or LSOAs, are then ranked according to their level of deprivation in comparison to other areas.
- 9.2.10 It should be noted that the IMD does not apply to every individual living in each LSOA. The IMD is designed to identify and measure specific aspects of deprivation, rather than measure individual affluence. According to the IMD, the majority of the most deprived 10% of neighbourhoods in England face multiple challenges, with 137 neighbourhoods in the most deprived 10% ranking as highly deprived in six of the seven domains.
- 9.2.11 The IMD was last updated in 2019¹¹⁷. Out of 317 Local Authorities in England, Wolverhampton is ranked as the 24th most deprived. Overall, deprivation is high across the WLP area, with 33 LSOAs in Wolverhampton ranked among the 10% most deprived in England.

Economy

- 9.2.12 The improvement and maintenance of high and stable levels of economic growth and employment are key aims of the strategies at UK and European levels. Other objectives include improvements to the education system to increase the skill levels of both children and adults, as well as improved productivity and innovation, particularly with regards to technology.
- 9.2.13 Key employment areas are defined as locations which would provide a range of employment opportunities from a variety of employment sectors, including retail parks,

¹¹⁶ Ministry of Housing, Communities and Local Government (2019) The English Indices of Deprivation 2019. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835115/loD2019_Statistical_Release.pdf [Date accessed: 01/11/22]

¹¹⁷ Ministry of Housing, Communities and Local Government (2019) English indices of deprivation 2019. Available at: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019> [Date accessed: 01/11/22]

industrial estates and major local employers. A total of 119,900 people in the WLP area are economically active as of June 2022 (**Table 9.2**).

Table 9.2: *Employment by occupation within the Black Country and Great Britain July 2021 - June 2022¹¹⁸*

Occupation	Wolverhampton (Numbers)	Wolverhampton (%)	West Midlands (%)	Great Britain (%)
Managers, Directors and Senior Officials	10,200	8.5	9.2	10.3
Professional Occupations	29,000	24.2	23.9	25.8
Associate Professional Occupations	18,400	15.3	14.6	15.0
Soc 2020 Major Group 4-5	22,300	18.6	19.4	18.7
Administrative & Secretarial Occupations	13,100	10.9	10.6	10.1
Skilled Trades Occupations	9,300	7.7	8.7	8.6
Soc 2020 Major Group 6-7	16,600	13.9	13.7	14.6
Caring, Leisure and Other Service Occupations	9,500	7.9	7.4	7.9
Sales and Customer Service Occupations	7,200	6.0	6.3	6.6
Soc 2020 Major Group 8-9	23,400	19.5	19.1	15.3
Process Plant & Machine Operatives	9,900	8.3	7.7	5.7
Elementary Occupations	13,500	11.3	11.4	9.6

9.2.14 Wolverhampton City Centre provides retail, office and leisure floorspace. **Figure 9.1** below shows the location of major employment sites across the WLP area, alongside accessibility modelling data. The map shows that almost the entirety of the WLP is within a 30-minute travel time to an employment site, either via walking or public transport.

9.2.15 The majority of new residents across the Plan area would therefore be expected to be located within a sustainable distance to employment opportunities. Development proposals located in urban areas would be expected to have good sustainable transport connections to nearby employment opportunities.

¹¹⁸ Nomis (2020) Labour Market Profile. Available at:

<https://www.nomisweb.co.uk/reports/lmp/la/1946157188/report.aspx?c1=1946157189&c2=1946157192> [Date accessed: 31/10/22]

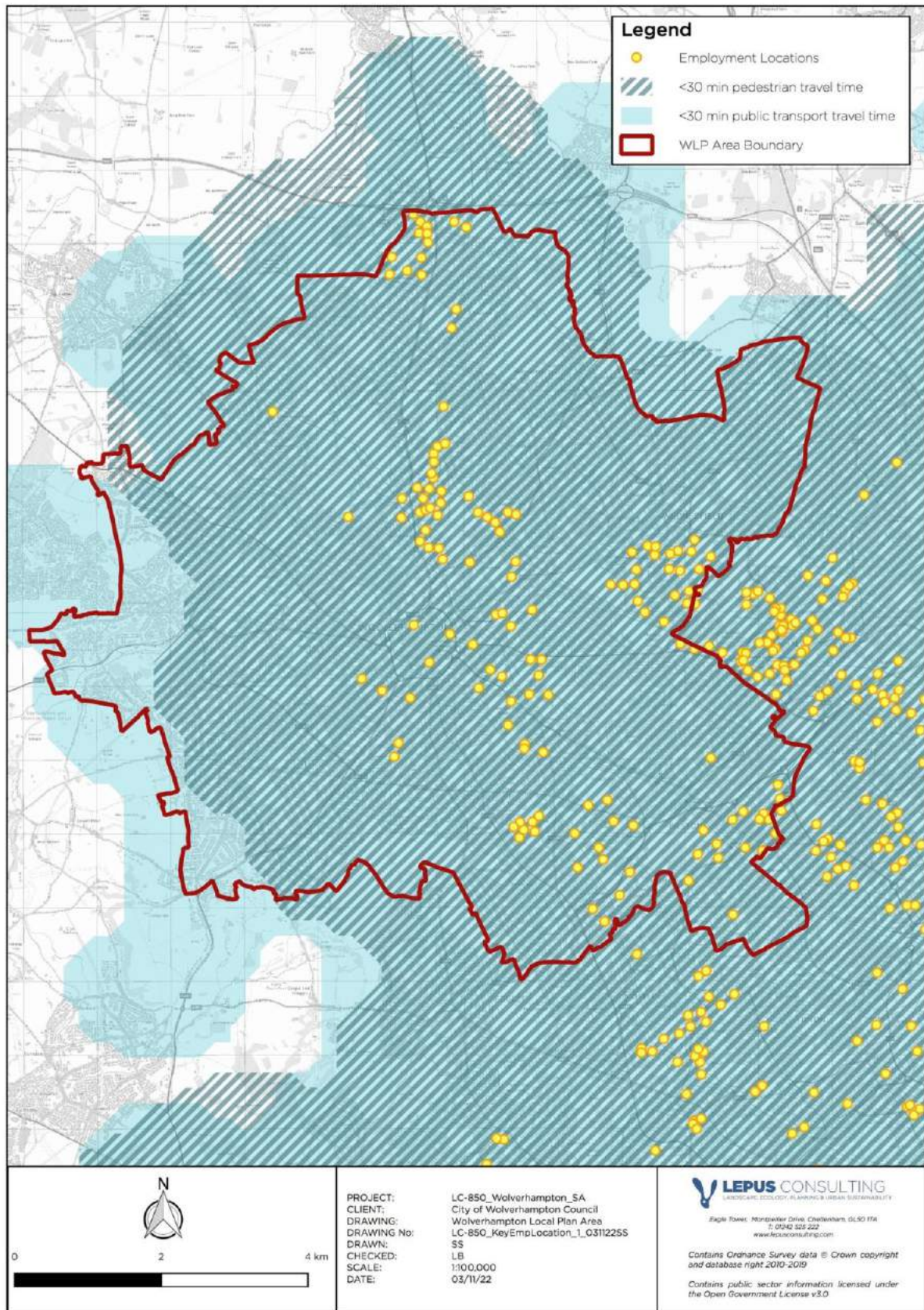


Figure 9.1: Key employment Locations and modelled travel time across the WLP area (source: CWC)

Education, Skills and Training

9.2.16 In general, education attainment is lower in the WLP area than England. **Table 9.3** presents the qualifications levels for the plan area.

Table 9.3: *Qualifications across the WLP area, January-December 2021¹¹⁹*

Qualifications	Wolverhampton
NVQ4 and above	35.2
NVQ3 and above	55.6
NVQ2 and above	72.1
NVQ1 and above	84.4
Other Qualifications	6.1
No Qualifications	9.5

9.2.17 There is a total of 94 primary and 22 secondary schools in the WLP area. It is assumed that new residents in the Plan area require access to primary and secondary education to help facilitate good levels of education, skills and qualifications of residents.

9.2.18 It is recognised that not all schools within the WLP area are accessible to all pupils. For instance, independent and academically selective schools may not be accessible to all, and some secondary schools may only be for girls or boys.

9.2.19 There are also a number of further education and higher education opportunities within the WLP and the adjacent districts including the University of Wolverhampton, Dudley College of Technology and Sandwell College. Within the wider West Midlands, there are several universities including the University of Birmingham, Birmingham City University and Aston University.

9.2.20 The location of primary and secondary schools within the WLP and the areas within a sustainable travel time to these schools have been mapped. **Figure 9.2** shows the areas of the WLP within a 15-minute walking distance to a primary school, and within a 25-minute walking distance and 25-minute distance via public transport to a secondary school. These travel times are assumed to be sustainable for the purposes of SA.

¹¹⁹ Nomis (2020) Labour Market Profile. Available at:
<https://www.nomisweb.co.uk/reports/lmp/la/1946157188/report.aspx?c1=1946157189&c2=1946157192> [Date accessed: 31/10/22]

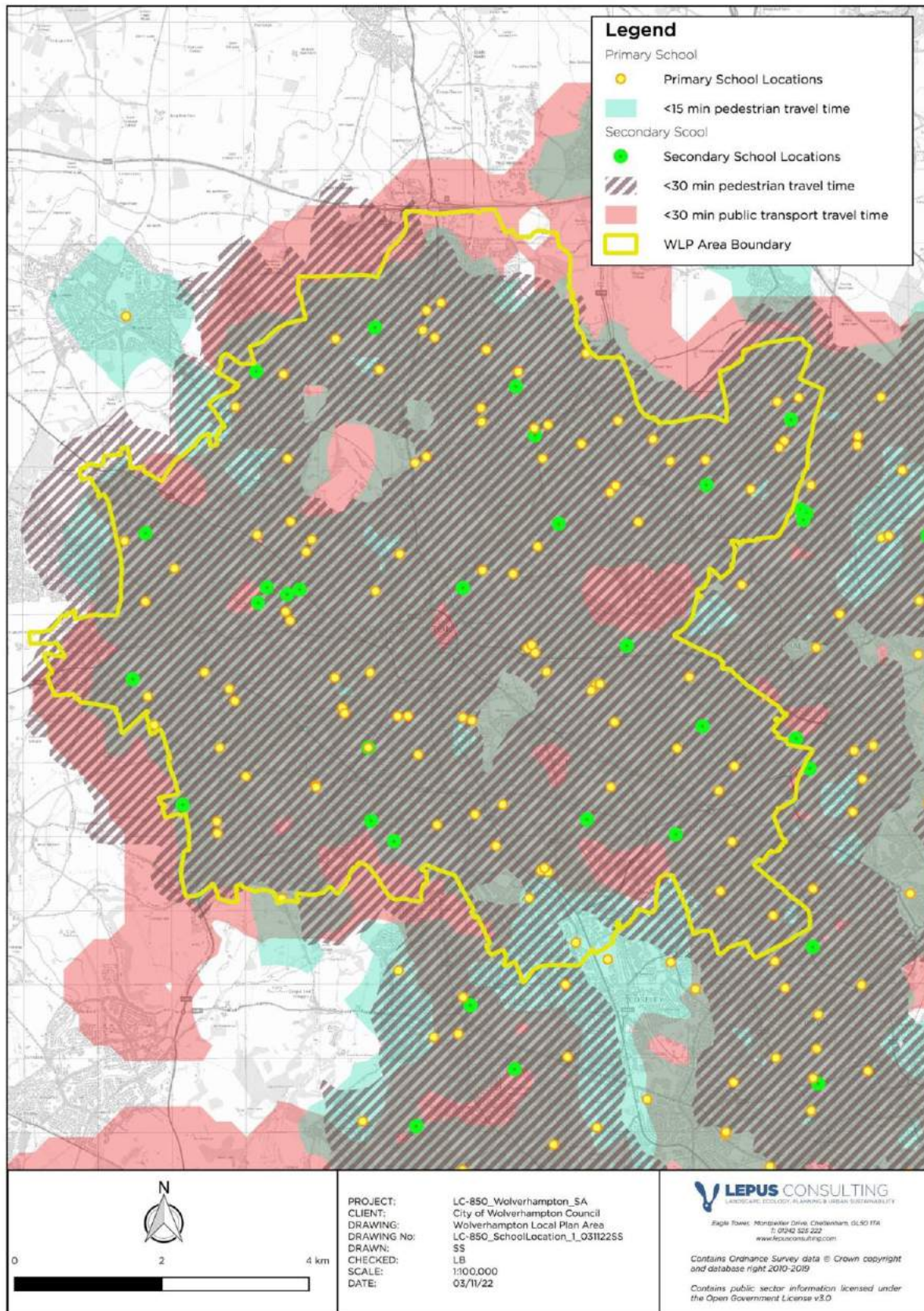


Figure 9.2: Location of schools and travel time across the WLP area (source: CWC)

Waste

- 9.2.21 Throughout the City of Wolverhampton and nationally, there is a need to increase the proportion of waste sent for reuse, recycling or compost and move away from the use of landfill for waste disposal. Government guidance documents including the 25 Year Environment Plan¹²⁰ and Waste Strategy for England¹²¹ highlight the importance of moving towards sustainable waste management and in particular cutting down on hazardous waste and single-use plastics which lead to adverse implications for the health of people and the environment.
- 9.2.22 The proposed development within the WLP area and associated increase in residents would be expected to result in a significant increase in waste produced. It is assumed that new residents in the WLP area will have an annual waste production of approximately 399kg per person, in line with the average for England in 2019¹²².
- 9.2.23 The proportion of local authority collected waste in the West Midlands sent for recycling and composting is below the national levels, whereas the waste managed through incineration is higher than national levels. According to the Black Country Waste Study¹²³, in 2017 waste from the Black Country received at permitted sites was managed in the following ways:
- 21% re-used and recycled;
 - 34% recovered or treated;
 - 9% temporarily stored at transfer stations; and
 - 36% disposed of to landfill.
- 9.2.24 Although national trends suggest that the volume of household waste produced is decreasing, the Waste Study¹²⁴ indicates that additional capacity for certain types of waste management will be required, taking into account the large amount of projected growth

¹²⁰ Defra (2018) A Green Future: Our 25 Year Plan to Improve the Environment. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf [Date accessed: 31/10/22]

¹²¹ Defra (2018) Our Waste, Our Resources: A Strategy for England. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf [Date accessed: 31/10/22]

¹²² Department for Environment, Food & Rural Affairs (2021) Statistics on waste managed by local authorities in England in 2020/21. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1040756/Statistics_on_waste_managed_by_local_authorities_in_England_in_2020_v2rev_accessible.pdf [Date accessed: 01/11/22]

¹²³ Wood (2020) Black Country Waste Study – Review of the Evidence Base for Waste to support Preparation of the Black Country Plan Revised Final Report. Available at: https://blackcountryplan.dudley.gov.uk/media/15811/black-country-waste-study-final-report_redacted.pdf [Date accessed: 03/02/21]

¹²⁴ Wood (2020) Black Country Waste Study – Review of the Evidence Base for Waste to support Preparation of the Black Country Plan Revised Final Report. Available at: https://blackcountryplan.dudley.gov.uk/media/15811/black-country-waste-study-final-report_redacted.pdf [Date accessed: 03/02/21]

in the area as well as continuing to facilitate the import of waste from other neighbouring authorities.

Renewable Energy

9.2.25 The topic of renewable energy is relevant to the theme of climate change. Renewable energy has been addressed under climate change in **Chapter 5**.

Housing

9.2.26 Government guidance requires local authorities to determine the local housing need figure for their area. The Local Plan preparation process should then test the deliverability of this housing need figure within the local authority area. The local housing need figure is calculated by summing the national standard method figure. This method uses 2014-based ONS household projections and affordability ratios which are updated annually¹²⁵.

9.2.27 CWC have produced a Strategic Housing Land Availability Assessment (SHLAA)¹²⁶, which will be updated annually, to assess land with potential for development in order to inform the housing land supply and trajectory. Sites for consideration in the WLP have been identified through the 'call for sites' process.

9.2.28 A key element of the vision of the WLP is to create a network of cohesive, healthy and prosperous communities across the City of Wolverhampton. It is assumed that the development proposals will provide a good mix of housing types and tenures in order to meet the identified needs for the population, including affordable housing, and accessible housing options particularly for people aged 65 and over.

9.2.29 Affordable housing is defined as "*social rented, affordable rented and intermediate housing, provided to specified eligible households whose needs are not met by the market*"¹²⁷. It is estimated that we need to build 3.1 million more social homes in England in the next 20 years.

Minerals

9.2.30 The presence of mineral resources, in particular coal, was a key reason for the original prosperity and development of the Black Country region. The legacy of mineral extraction

¹²⁵ Black Country Plan. Black Country Urban Capacity Review Update (may, 2021) Accessed at: <https://blackcountryplan.dudley.gov.uk/media/17940/bc-urban-capacity-review-update-2020-may-2021-final-140521.pdf> [Date accessed: 28/10/22]

¹²⁶ City of Wolverhampton Council (2021) Wolverhampton Strategic Housing Land Availability Assessment (SHLAA) Update as of April 2020, Published: May 2021. Available at: <https://www.wolverhampton.gov.uk/sites/default/files/2021-06/Wolverhampton%20SHLAA%20Update%20May%202021.pdf> [Date accessed: 01/11/22]

¹²⁷ Ministry of Housing, Communities and Local Government (2021) Affordable housing supply. Available at: <https://www.gov.uk/government/collections/affordable-housing-supply> [Date accessed: 31/10/22]

on ground stability and contamination remains a key issue affecting future development, and some minerals are still of economic importance with active quarries and brickworks.

9.2.31 There is one manufacturing centre for concrete products, seven concrete batching plants, two dry silo mortar plants, one coating plant and two aggregate recycling plant within the WLP area.

9.2.32 There is a need for a balanced approach between safeguarding mineral resources and supporting housing and economic growth. The protection and extraction of minerals resources is important to help support the levels of development proposed over the Plan period and to meet demand for aggregates. There are no mineral safeguarding areas in the WLP area.

9.3 Key Issues

- The population of the City of Wolverhampton is expected to continue to increase, this will have secondary effects.
- New business start-ups should continue to be encouraged in the WLP area.
- NVQ qualifications in Wolverhampton are generally lower than regional and national percentages.
- The employment level for Wolverhampton is lower than that for Great Britain overall.
- House prices are expected to increase and demand for housing will remain high.
- Energy consumption from industrial and commercial sources in Wolverhampton is high and is expected to increase.
- There is a need to increase the proportion of waste sent for reuse, recycling or compost and move away from the use of landfill for waste disposal.
- There is a need to identify and support opportunities for renewable energy provision locally.

10 Water and Soil Resources

10.1 Introduction

- 10.1.1 National water policies are primarily driven by the aims of the EU Water Framework Directive 2000/60/EC, as translated into national law by the Water Framework Regulations 2003. Key objectives include improving the quality of rivers and other water bodies to 'good ecological status' by 2027; considering flood risk at all stages of the plan and development process in order to reduce future damage to property and loss of life; and incorporating water efficiency measures into new developments.
- 10.1.2 National strategies have a focus on maintaining and protecting the availability of water. Water supply and use is guided by EA's Catchment Abstraction Management Strategies (CAMS). Setting out how water quality can be improved, the Severn¹²⁸ River Basin Management Plans (2015) have also been prepared by the EA under the Water Framework Directive, which includes the Warwickshire Avon catchment.
- 10.1.3 The NPPF seeks to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk. Flood risk is discussed further in **Chapter 5**.
- 10.1.4 National policies and strategies on soil, including DEFRA's 'Safeguarding our Soils' strategy¹²⁹, seek to prevent soil pollution; reduce soil erosion from wind and water; maintain soil diversity; improve the quality of soil, including through promoting an increase in organic matter in soil and increase the resilience of soils to a changing climate. Focus should be placed on protecting the quality and availability of agricultural land, through reducing soil degradation and maintaining soil productivity.

¹²⁸ Environment Agency (2015) Water for life and livelihoods Part 1: Severn river basin district River basin management plan. Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718336/Severn_RBD_Part_1_river_basin_management_plan.pdf [Date accessed: 28/10/22]

¹²⁹ Department for Environment, Food & Rural Affairs (2011) Safeguarding our soils: A strategy for England. Available at:
<https://www.gov.uk/government/publications/safeguarding-our-soils-a-strategy-for-england> [Date accessed: 28/10/22]

10.2 Baseline data

Soil

10.2.1 As highlighted by the Soil Strategy for England¹³⁰, soil is a vital natural resource, with a range of key functions. These include:

- Support of food, fuel and fibre production;
- Environmental interaction functions (e.g. regulating the flow of and filtering substances from water, emitting and removing atmospheric gases, storing carbon);
- Support of habitats and biodiversity;
- Protection of cultural heritage and archaeology;
- Providing a platform for construction; and
- Providing raw materials.

10.2.2 Soil is an essential and non-renewable resource that provides a wide range of ecosystem services. It filters air, stores and cycles water and nutrients, decomposes and cycles organic matter, supports plant growth and provides medicines. It is also one of the most important natural carbon sinks available and is vital in efforts to mitigate climate change.

10.2.3 The protection of soil is crucial for future sustainability, since it plays a vital role in food and timber production, in the maintenance of our biodiversity, as a reservoir for water and as a buffer and filter for pollutants. In recent decades agricultural intensification, afforestation and increased pollution from industrial sources has resulted in some loss of soil function and structure in localised areas.

10.2.4 Although the majority of Wolverhampton has been urbanised, the WLP area has a diverse underlying soil resource, which has developed since the last ice age 10,000 years ago. This encompasses a range of soil types which reflect complex interactions between underlying geology, landform, past and existing land use and climate.

10.2.5 It is therefore important for decision makers to make best efforts to preserve soil resources. Development can potentially have adverse impacts on soil stocks, such as by direct loss of soil (e.g. excavating), contamination, increased erosion, breakdown of structure and loss of nutrients. The quality of soils in the UK has rapidly degraded, predominantly due to intensive agricultural production and industrial pollution. The UK's soil continues to face three main threats¹³¹:

¹³⁰ DEFRA (2009) Safeguarding our Soils: A Strategy for England. Available at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69261/pb13297-soil-strategy-090910.pdf [Date accessed: 31/10/22]

¹³¹ Department for Environment, Food and Rural Affairs (2009) Safeguarding our soils – A strategy for England. Defra, September 2009 [Date accessed: 28/10/22]

- Soil erosion by wind and rain (it is estimated that the UK loses 2.2 million tonnes of topsoil every year due to wind and water erosion);
- Compaction; and
- Organic matter decline.

10.2.6 Construction on land has the potential to exacerbate compaction of soils and the decline in organic matter, whilst all three are expected to be exacerbated by climate change.

10.2.7 Soils in the WLP area are varied (see **Table 10.1**). Most of the areas support arable and grassland habitats, with some also supporting woodland, forestry and horticulture. The carbon storage of the common soils in the area is low, whilst the permeability (which impacts surface water run-off) is primarily impeded in some places and freely draining in others.

Table 10.1: Most prominent/common soils in Wolverhampton¹³²

Soil	Texture	Permeability	Fertility	Carbon storage	Landcover
Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils	Loamy and clayey	Impeded drainage	Moderate	Low	Grassland and arable some woodland
Slowly permeable seasonally wet acid loamy and clayey soils	Loamy and clayey	Impeded drainage	Low	Medium	Grassland with some arable and forestry
Slightly acid loamy and clayey soils with impeded drainage	Loamy, some clayey	Slightly impeded drainage	Moderate to high	Low	Arable and Grassland
Freely draining slightly acid sandy soils	Sandy	Freely draining	Low	Low	Arable
Freely draining slightly acid loamy soils	Loamy	Freely draining	Low	Low	Arable and Grassland
Naturally wet very acid sandy and loamy soils	Sandy and loamy	Naturally wet	Very low	Medium	Arable and horticulture some wet lowland heath

¹³² Cranfield Soil and Agrifood Institute (2018) Soilscales. Available at: <http://www.landis.org.uk/soilscales/> [Date accessed: 28/10/22]

10.2.8 In accordance with paragraph 174 of the NPPF, development can have an irreversible adverse (cumulative) impact on the finite stock of best and most versatile (BMV) land. Avoiding the loss of BMV land is a priority as mitigation is rarely possible. BMV is usually indicated by Agricultural Land Classification (ALC). The ALC system classifies land into five categories according to versatility and suitability for growing crops. The top three grades, Grades 1, 2 and 3a, are referred to as BMV land¹³³. The grades are as follows:

- Grade 1 – excellent quality agricultural land
- Grade 2 – very good quality agricultural land
- Grade 3 – good to moderate quality agricultural land
 - Subgrade 3a – good quality agricultural land
 - Subgrade 3b – moderate quality agricultural land
- Grade 4 – poor quality agricultural land
- Grade 5 – very poor-quality agricultural land

10.2.9 The majority of land in the WLP area is ALC 'urban', with pockets of ALC Grade 2, 3 and 4 (see Figure 10.1). There is no Grade 1 land within Wolverhampton.

¹³³ MAFF (1988) Agricultural Land Classification of England And Wales: Revised criteria for grading the quality of agricultural land. Available at:
<http://publications.naturalengland.org.uk/publication/6257050620264448?category=5954148537204736> [Date accessed: 28/10/22]

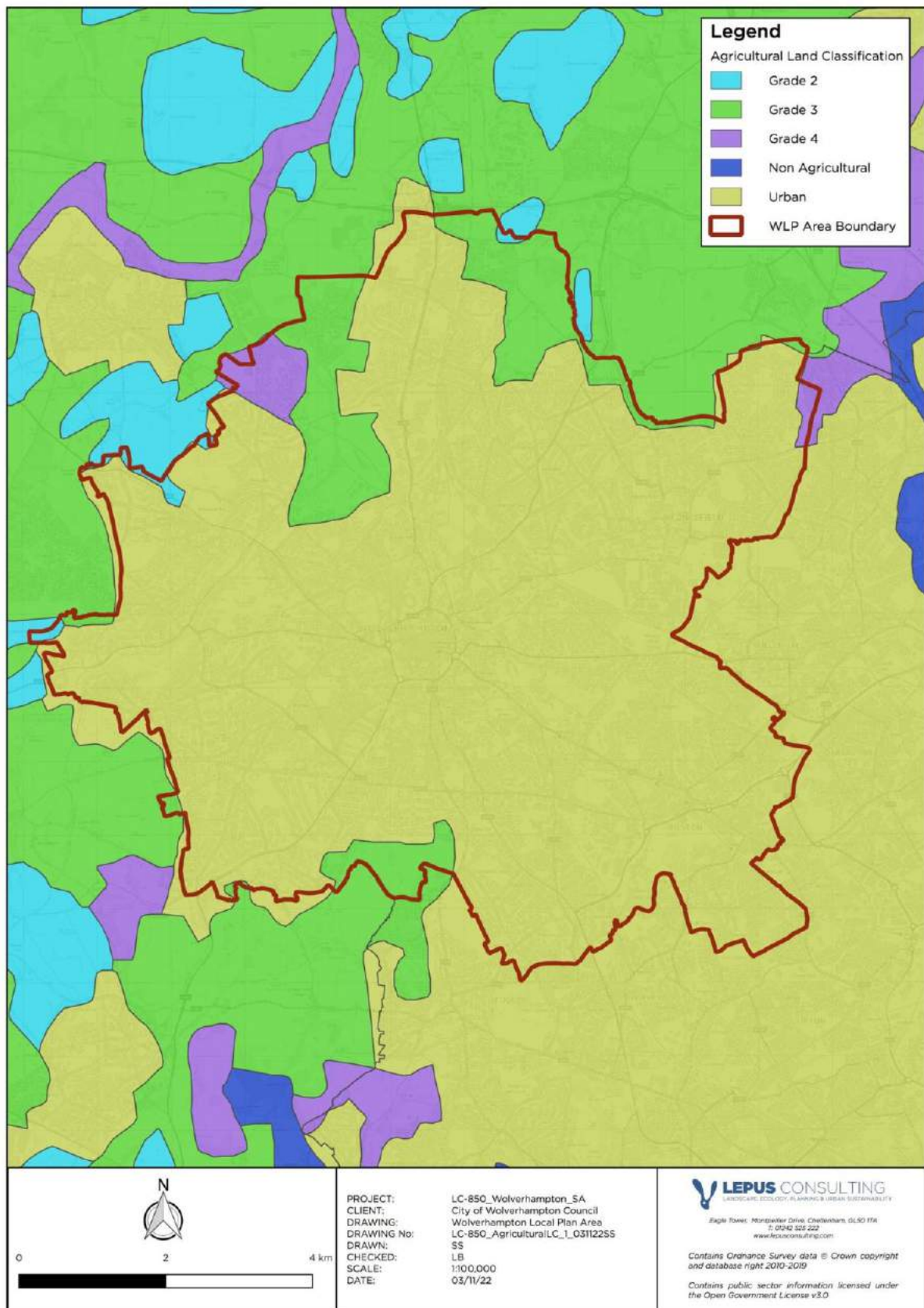


Figure 10.1: Agricultural Land Classification in and around the WLP area (source: Natural England)

Soil pollution and Contaminated land

10.2.10 Soil pollution can refer to land which is contaminated by a range of pollutants including heavy metals, oils, chemicals and radioactive substances¹³⁴. Land is legally defined as 'contaminated land' where substances have the potential to cause:

- significant harm to people, property or protected species;
- significant pollution of surface water (for example lakes and rivers) or groundwater; or
- harm to people as a result of radioactivity.

10.2.11 In accordance with the core planning principles of the NPPF¹³⁵, development on previously developed land (PDL) will be recognised as an efficient use of land. Development on previously undeveloped land is not considered to be an efficient use of land. Development proposals situated on previously undeveloped land are expected to pose a threat to the soil resource within the proposal perimeter due to excavation, soil compaction, erosion and an increased risk of soil pollution and contamination during the construction phase. This is expected to be a permanent and irreversible impact.

10.2.12 It should be noted that PDL could also be of environmental value, and as such, potential impacts on natural resources shall be considered on a site-by-site basis.

10.2.13 Many urban brownfield sites in the WLP area, and some greenfield sites, are affected by the legacy of mining in the area. The exploitation of minerals has led to some localised issues with ground contamination and instability¹³⁶. It is anticipated that development proposals within the WLP will require site-specific assessments of ground contamination and effective remediation of soils affected prior to development.

Water resources

10.2.14 The national mandatory water efficiency standard is 125 litres per person per day, as set out in the Building Regulations 2010¹³⁷. CWC may seek to introduce a higher standard of 110 litres per person per day in line with the Building Regulations Part G¹³⁸ optional requirement.

¹³⁴ Contaminated land. Available at: <https://www.gov.uk/contaminated-land> [Date accessed: 28/10/22]

¹³⁵ Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 28/10/22]

¹³⁶ Mott Macdonald (2009) Black Country JCS Stage 2: Infrastructure and Deliverability Study. Available at: <https://blackcountryplan.dudley.gov.uk/t1/p1/t1p1f/> [Date accessed: 28/10/22]

¹³⁷ The Building Regulations 2010. Available at: <http://www.legislation.gov.uk/uksi/2010/2214/contents/made> [Date accessed: 28/10/22]

¹³⁸ MHCLG (2016) Sanitation, hot water safety and water efficiency: Approved Document G. Available at: <https://www.gov.uk/government/publications/sanitation-hot-water-safety-and-water-efficiency-approved-document-g> [Date accessed: 28/10/22]

- 10.2.15 It is assumed that all residential-led development proposals in the WLP will be subject to appropriate approvals and licensing for sustainable water supply from the Environment Agency.
- 10.2.16 Wolverhampton is supplied with water by Severn Trent Water and South Staffs Water. Sewerage services are also provided by Severn Trent Water and South Staffs Water. Drivers of increased water demand include increase in population, decrease in household occupancy and climate change. Severn Trent Water¹³⁹ and South Staffs Water¹⁴⁰ plan to manage and meet future demand through encouraging water use efficiency, for example by installing water meters, and reducing leakage.
- 10.2.17 The Water Resources Management Plan (WRMP) prepared by each water company estimates future water demands and plans how these levels will be achieved. The WRMP forecasts a significant deficit that is likely to develop between supply and demand for water over time unless action is taken¹⁴¹. The WRMP outlines a number of demand management measures that need to be taken to ensure continued sustainable sources of supply including:
- Reducing abstraction from those water sources that have a detrimental impact on the environment
 - Making sure our future water abstractions do not pose a risk environmental deterioration, as required by the Water Framework Directive
 - Increasing the flexibility and resilience of our supply system
 - Increasing or optimizing deployable output from existing, sustainable sources where possible
 - Using catchment restoration techniques to improve habitats and ecological resilience to low flows
 - Using catchment management measures to protect our sources of drinking water supply from pollution risks
- 10.2.18 The volume of wastewater is likely to increase following development in the WLP area. Wastewater treatment plants will need to ensure there is the capability to withstand the additional capacity and be expanded if necessary, prior to development taking place.

¹³⁹ Water Resources Management Plan 2019. Available at: <https://www.stwater.co.uk/content/dam/stw-plc/our-plans/severn-trent-water-resource-management-plan.pdf> [Date accessed: 28/10/22]

¹⁴⁰ South Staffs Water. Water Resources Management Plan 2019. Available at: <https://www.south-staffs-water.co.uk/media/2676/final-wrmp-2019-south-staffs-water.pdf> [Date accessed: 28/10/22]

¹⁴¹ Water Resources Management Plan 2019. Available at: <https://www.stwater.co.uk/content/dam/stw-plc/our-plans/severn-trent-water-resource-management-plan.pdf> [Date accessed: 1/11/22]

- 10.2.19 Catchment Area Management Strategies (CAMS) are six-year strategies developed by the Environment Agency for managing water resources at the local level. CAMS are to be produced for every river catchment area in England and Wales. The WLP area is located within the Worcestershire Middle Severn and the Tame, Anker and Mease catchment areas¹⁴².
- 10.2.20 There is water available for licensing in the Worcestershire Middle Severn¹⁴³ catchment area and the Tame, Anker and Mease¹⁴⁴ catchment area. Flows of the rivers in these catchments are likely to be above the requirement to meet Good Ecological Status.
- 10.2.21 The percentage reliability of consumptive abstraction in the Worcestershire Middle Severn CAMS¹⁴⁵ is available less than 30% of the time. The percentage reliability of consumptive abstraction in the Tame, Anker and Mease CAMS is available less than 30% of the time.
- 10.2.22 The Worcestershire Middle Severn and the Tame, Anker and Mease Abstraction Licensing Strategy¹⁴⁶ state that no reductions in abstraction are required and that other cost-efficient methods can be used to tackle the impacts of abstraction. The Environment Agency proposes to define the 'hands off flow (HOF)' (the reduction in flow below which abstraction must stop) depending on the level of abstraction required, the perceived level of risk to the waterbody and any local features in need of additional protection.

¹⁴² Environment Agency (2022) Catchment Data Explorer. Available at: <http://environment.data.gov.uk/catchment-planning/> [Date accessed: 28/10/22]

¹⁴³ Environment Agency (2022) Worcestershire Middle Severn Abstraction Licensing Strategy. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/305450/lit_5356_35376b.pdf [Date accessed: 28/10/22]

¹⁴⁴ Environment Agency (2022) Tame, Anker and Mease abstraction licensing strategy. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/291402/LIT_3306_bc78df.pdf [Date accessed: 28/10/22]

¹⁴⁵ Environment Agency (2022) Worcestershire Middle Severn Abstraction Licensing Strategy. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/305450/lit_5356_35376b.pdf [Date accessed: 28/10/22]

¹⁴⁶ Environment Agency (2022) Catchment Data Explorer. Available at: <http://environment.data.gov.uk/catchment-planning/> [Date accessed: 01/11/22]

Water quality

- 10.2.23 Undertaking a Water Cycle Study (WCS) can help to inform Local Plans and wastewater infrastructure delivery requirements, water resources and water efficiency requirements to plan for sustainable growth. Through understanding environmental and infrastructure capacity, a WCS can identify joined up and cost-effective solutions that are resilient to climate change¹⁴⁷. A Phase 1 WCS Scoping Study was undertaken to support the preparation of the BCP¹⁴⁸, the findings of which remain applicable to the preparation of the WLP.
- 10.2.24 The vulnerability of groundwater to pollution is determined by the physical, chemical and biological properties of the soil and rocks, which control the ease with which an unprotected hazard can affect groundwater. The EA has produced a document which provides information on how they manage and protect groundwater¹⁴⁹. Groundwater Source Protection Zones (SPZs) indicate the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants.
- 10.2.25 There are three categories of SPZ¹⁵⁰ as follows:
- Zone 1 – Inner Protection Zone: the 50-day travel time from any point below the water table to the source, with a minimum radius of 50m
 - Zone 2 – Outer Protection Zone: the 400-day travel time from a point below the water table to the source, with a minimum radius of 250-500m
 - Zone 3 – Source Catchment Protection Zone: area around a source within which all groundwater recharge is discharged at the source

¹⁴⁷ Ministry of Housing, Communities and Local Government (2019) Water supply, wastewater and water quality. Available at: <https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality#water-cycle-studies> [Date accessed: 31/10/22]

¹⁴⁸ JBA Consulting (2020) Black Country Councils Water Cycle Study: Phase 1 Scoping Study. Available at: https://blackcountryplan.dudley.gov.uk/media/17929/watercyclestudy_phs1_scopingstudy.pdf [Date accessed: 01/11/22]

¹⁴⁹ Environment Agency (2018) The Environment Agency's approach to groundwater protection, February 2018, Version 1.2. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf [Date accessed: 31/10/22]

¹⁵⁰ Environment Agency (2019) Manual for the production of Groundwater Source Protection Zones – March 2019. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/822402/Manual-for-the-production-of-Groundwater-Source-Protection-Zones.pdf [Date accessed: 31/10/22]

10.2.26 Designed to protect individual groundwater sources, these zones show the risk of contamination from any activities that might cause pollution in the area. In this context they are used to inform pollution prevention measures in areas which are at a higher risk, and to monitor the activities of potential polluting activities nearby. SPZs are present in west of WLP area, which is predominantly SPZ 3, with smaller areas of SPZ 1 and 2 (see Figure 10.2).

10.2.27 Local authorities and developers can play a significant role in improving the local water environment, for example through Local Plan policies, urban regeneration or catchment restoration and GI projects. Typical improvements might include:

- Restoring rivers and floodplains or corridors to a more natural state
- Removing barriers to fish movement
- Promoting efficient and sustainable use of water resources in developments
- Promoting the use of Sustainable Drainage Systems (SuDS)
- De-culverting watercourses
- Managing pollution from wastewater

Flooding

10.2.28 The topic of flooding is relevant to the themes of soil, water and climate change. Flooding has been addressed under climate change in **Chapter 5**.

River ecology

10.2.29 The topic of river ecology is relevant to the themes of biodiversity, water and soil. River ecology has been addressed under biodiversity in **Chapter 4**.

Water pollution

10.2.30 Construction activities in or near watercourses have the potential to cause pollution, impact upon the bed and banks of watercourses and impact upon the quality of the water¹⁵¹. Watercourses that pass through the city of Wolverhampton include the River Penk, River Tame and Smestow Brook, in addition to the canal network.

¹⁵¹ World Health Organisation (1996) Water Quality Monitoring - A Practical Guide to the Design and Implementation of Freshwater Quality Studies and Monitoring Programmes: Chapter 2 – Water Quality. Available at: <https://apps.who.int/iris/handle/10665/41851> [Date accessed: 01/11/22]

10.2.31 An approximate 10m buffer zone from a watercourse should be used in which no works, clearance, storage or run-off should be permitted¹⁵². However, it is considered that development further away than this has the potential to lead to adverse impacts such as those resulting from runoff. Each development proposal would need to be evaluated according to land use type, size of development and exact location to determine the potential impacts on water quality.

10.3 Key issues

- Soil is a non-renewable resource that would continue to be lost. The majority of land in the WLP area is ALC 'urban', with pockets of ALC Grade 3 and ALC Grade 4, which may be under threat from new growth areas and associated infrastructure.
- The development of new and improved infrastructure to accompany growth has the potential to lead to an increase in soil erosion and soil loss.
- A proportion of Wolverhampton contains groundwater SPZs.

¹⁵² Department of Agriculture, Environment and Rural Affairs (no date) Advice and Information for planning approval on land which is of nature conservation value. Available at: <https://www.daera-ni.gov.uk/articles/advice-and-information-planning-approval-land-which-nature-conservation-value> [Date accessed: 01/11/22]

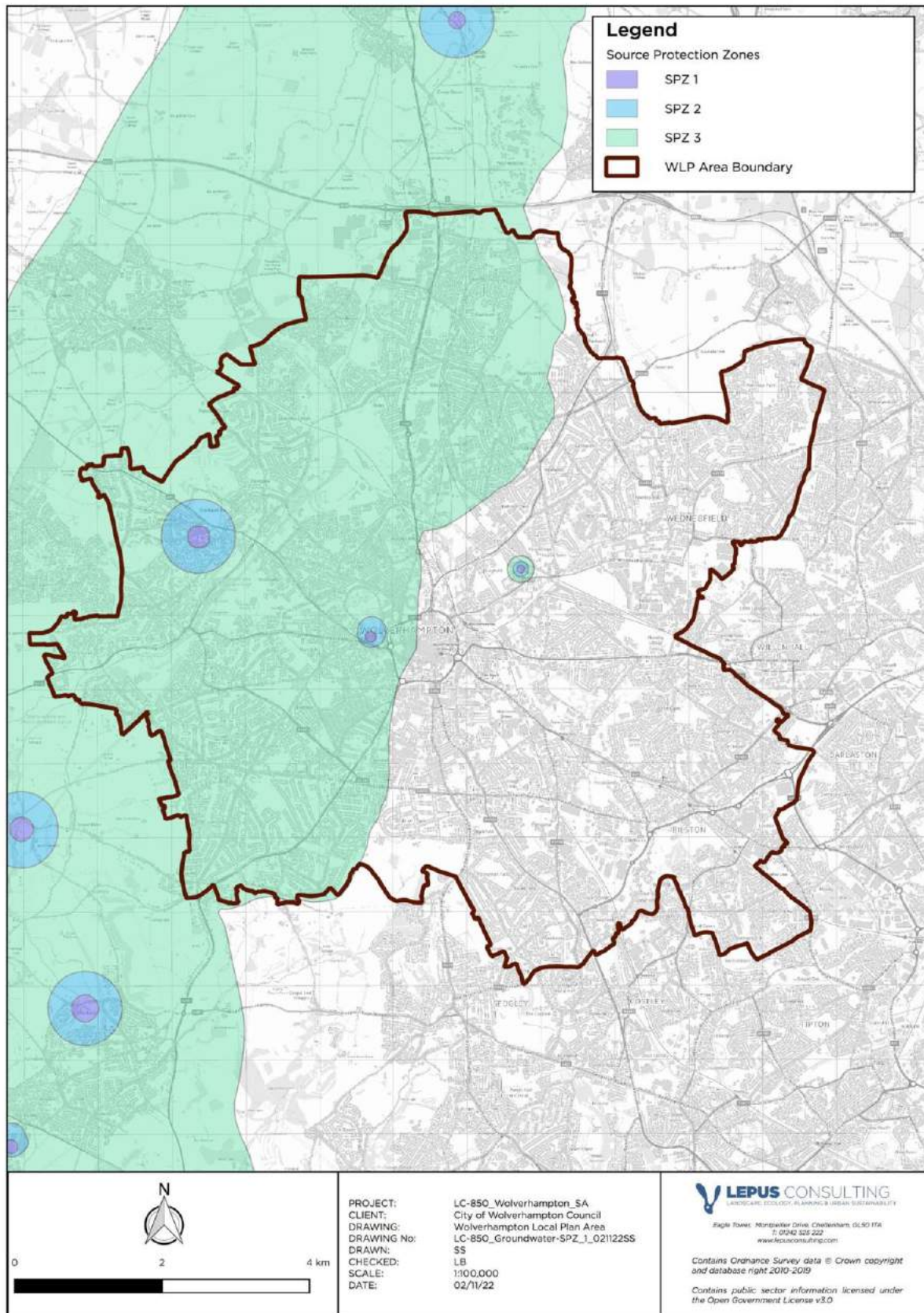


Figure 10.2: Groundwater Source Protection Zones (SPZs) in and around the WLP area (source: Environment Agency)

11 Future evolution of the baseline without the WLP

- 11.1.1 The SEA Regulations¹⁵³ requires the SA to present information on *"the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme"*.
- 11.1.2 Without the WLP, no new plan-led development would occur within the Wolverhampton area over and above that which is currently proposed in the adopted Black Country Core Strategy, the saved parts of the Wolverhampton Unitary Development Plan and the adopted Area Action Plans. In this scenario, an appeal-led system would predominate. It is uncertain the extent to which development may occur, what its spatial characteristics may be and whether it would meet the needs of local residents. In a 'no plan' scenario, other plans and policies would continue to be a material consideration in planning decisions and legislative protection would continue to be in place.
- 11.1.3 Based on local and national trend data, the likely evolution of the environment in the WLP area is presented in **Table 11.1**.

Table 11.1: Future evolution of the baseline without the WLP

Theme	Likely evolution of the environment without the WLP
Accessibility and Transport	<ul style="list-style-type: none"> • Congestion issues in and around the City of Wolverhampton would be likely to be exacerbated due to a rising population. • There is likely to be an increase in the proportion of the road transport fleet which are electric or hybrid vehicles. • It is uncertain the proportion of residents in the WLP area that would opt to use sustainable transport modes. • The Local Transport Plan will still be implemented, which would be likely to have a positive impact on the local road network, relieving congestion and improving provision of public transport across the plan area.
Air Quality	<ul style="list-style-type: none"> • Primary sources of air pollution in the UK include road transport, industry, imports and agriculture. These sources would not be expected to change. • Traffic and congestion are likely to increase with population growth, with implications in particular for air quality, residents and wildlife, especially those within 200m of main roads. • The Wolverhampton AQMA covers the whole local authority area and the principal pollutant affecting air quality is nitrogen dioxide (NO₂), mostly sourced from road traffic. Continuing to monitor air quality, especially within AQMAs, and implementation of measures outlined in Air Quality Action Plans will ensure that objectives are in place to decrease exceedances over time.

¹⁵³ Environmental Assessment of Plans and Programmes Regulations (2004). Available at: <http://www.legislation.gov.uk/ukxi/2004/1633/contents/made> [Date accessed: 24/10/22]

Theme	Likely evolution of the environment without the WLP
	<ul style="list-style-type: none"> National trends suggest there is an increasing uptake of lower emission vehicle types, such as electric cars, which will be likely to help limit road transport associated emissions in the WLP area and would be likely to further improve air quality.
Biodiversity, Flora and Fauna, and Geodiversity	<ul style="list-style-type: none"> Sites designated for their national and international biodiversity and/or geodiversity value would continue to benefit from legislative protection. Biodiversity net gain at development sites would be expected, due to policies set out in the NPPF and as set out in the Environment Act. The NPPF and its policies relating to biodiversity would continue to be material considerations in planning decisions. It is uncertain if development proposals would voluntarily adopt additional biodiversity enhancement measures. It is uncertain if there would be an opportunity to establish a strategically planned green infrastructure network across Wolverhampton without the WLP, which may reduce the likelihood for significant net gain in biodiversity via planned developments. It may be difficult to ensure that development is of appropriate type, scale and location to avoid adverse impacts on either biodiversity/geodiversity designations (of international or local significance) or on the functioning ecological network of the WLP area and the various essential ecosystem services this provides.
Climatic Factors	<ul style="list-style-type: none"> Climatic and anthropogenic-induced climate change are increasing concerns for the WLP area. Emissions could continue to rise, and future development may not be as low carbon as possible, with potential for little demand for locally generated sustainable energy. The risk of flooding will be likely to increase over time due to the changing climate, increasing the occurrence of extreme weather events and the existing urbanised nature of the WLP area. The risk of surface water flooding will depend on the size, nature and extent of non-porous built surface cover in the future, and the effectiveness of the existing drainage system. Total carbon emissions are expected to continue to decrease over the longer term as renewable energy becomes an increasingly competitive force in the UK energy market. It is uncertain if there would be an opportunity to seek aspirational targets in regard to energy efficiency within development in association with meeting the target of carbon neutrality by 2050 in the absence of the WLP. Technological advances, which may include renewable energies, electric vehicles, and efficient electricity supplies, would be expected to occur. The lack of a planned growth strategy could lead to increased carbon emissions as development may be less likely to be located in sustainable locations.
Cultural Heritage	<ul style="list-style-type: none"> National and local guidance seeks to protect designated assets and their settings such as Listed Buildings, Conservation Areas, Scheduled Monuments, and Registered Parks and Gardens. The Heritage at Risk Register will continue to be managed by Historic England who will continue to work with stakeholders to protect these assets. Further heritage assets are likely to be identified in the future, with or without the Plan. It is uncertain if connectivity with places, local distinctiveness and culture would be emphasised and protected in the absence of the WLP as it is anticipated that the WLP will require a Heritage Statement or Archaeological

Theme	Likely evolution of the environment without the WLP
	<p>Desk-Based Assessment to be prepared to accompany future planning applications, where appropriate.</p>
<p>Human Health</p>	<ul style="list-style-type: none"> • The population is expected to continue to increase. This is likely to place greater pressure on the capacity of key services and amenities, including health and leisure facilities and housing. • The life expectancy of men and women is anticipated to rise over time, in line with national trends, leading to a greater proportion of older residents with specific needs for housing and services. • It is uncertain if existing public green spaces would be maintained and enhanced, to encourage residents to live healthy and active lifestyles.
<p>Landscape and Townscape</p>	<ul style="list-style-type: none"> • The West Midlands Green Belt will continue to benefit from legislative protection. • The WLP area will remain amongst the least tranquil areas of the West Midlands. • It is uncertain the extent to which development would seek to conserve and enhance the character of local landscape and townscapes. In the absence of Plan-led development, there could potentially be a rise in the quantity of new development which discords with the local character by altering the style and scale of development.
<p>Population and Material Assets</p>	<ul style="list-style-type: none"> • The population of Wolverhampton is expected to continue to increase, which would be likely to result in secondary effects. Some of these secondary effects could include effects on health, education and social inequalities due to poorer accommodation and potential for fewer sustainable travel choices being available. • Energy consumption in all sectors is expected to increase. • There is likely to be a continued increase in the cost of buying or renting housing, although the rate of increase may reduce compared to previous years, in line with national trends. It is uncertain if future housing provision would satisfy local needs in terms of type, cost and location. • There is expected to be a shortage of housing in the area. This could lead to existing residents who wish to form new households living in overcrowded conditions or being forced to move outside the area, and potential new residents being unable to move in. • There will be less planning control over the location of future housing, with potential for planning applications for new housing being allowed in unsustainable locations and/or without necessary supporting infrastructure. • There is a need for more affordable housing within the WLP area, which could potentially be exacerbated without the WLP. • Continuing transformation of employment land into high quality employment land is likely in the absence of the WLP. • The number of jobs and businesses in the WLP is expected to increase based on current trend data. Although, there may be less planning control over the location of employment land and there may be limited job availability in some sectors if land is not allocated through the WLP. • Without a clear strategy to focus the limited amount of investment into centres and to defend against further investment in out-of-centre locations, the vitality of Wolverhampton City Centre may decline. This will have consequences in terms of opportunities for residents to access facilities, services and jobs, especially those who are disadvantaged. Furthermore, without investment concentrated into accessible centres there will be a less sustainable

Theme	Likely evolution of the environment without the WLP
	<p>development pattern resulting in an increased need to travel, leading to increases in GHG emissions. Declining centres will contribute to poor social inclusion.</p>
<p>Soil and Water Resources</p>	<ul style="list-style-type: none"> • Soil is a non-renewable resource that would be likely to continue to be lost. • Rates of soil erosion and loss of soil fertility will be likely to continue to rise due to the impacts of agriculture and climate change. • There could potentially be new developments that result in over-capacity issues at wastewater treatment works (either cumulatively or individually). • The population in the WLP area will be likely to rise and water demand will subsequently be likely to rise. In the absence of plan-led development, the efficiency and sustainability of water consumption may be unlikely to improve. • In the absence of plan-led development, the efficiency and sustainability of water consumption may be unlikely to improve owing to the likely increase in population and associated water demand, depending on the nature of any future changes to national regulations, such as the Building Regulations and any emerging policy / regulations relating to water neutrality. • Water abstraction, consumption and treatment in the local area will continue to be managed by the Environment Agency and water companies through the Humber and Severn RBMPs, WRMP and CAMS in line with the EU Water Framework Directive.

12 SA Framework

12.1 The purpose of the SA Framework

- 12.1.1 The WLP will be assessed through the SA Framework of objectives, decision-making criteria and indicators. The full SA Framework for the WLP is presented in **Appendix B**.
- 12.1.2 The SA Framework provides a way in which sustainability effects can be described, analysed and compared. The SA Framework consists of SA Objectives, the achievement of which (where practicable), is measurable using indicators. SA Objectives and indicators can be revised as further baseline information is collected and sustainability issues and challenges are identified and are used in monitoring the implementation of the WLP.
- 12.1.3 To expand on the central focus of each SA Objective (as they are high-level and potentially open-ended) the SA Framework includes a series of questions or 'decision making criteria' for use when applying the SA Framework to the assessment of proposed policies.

12.2 Sustainability Appraisal Objectives

- 12.2.1 The purpose of the SA Objectives is to provide a way of ensuring the proposed policies consider the needs of the WLP area in terms of the environmental, social and economic effects. The SA topics identified in Schedule 2 of the SEA Regulations are one of the key determinants when considering which SA Objectives should be used for the environmental criteria. Consequently, the SA Objectives seek to reflect all subject areas to ensure the assessment process is transparent, robust and thorough.
- 12.2.2 The SA Objectives have drawn on the baseline information, the key issues and other plans and programmes of particular interest discussed earlier in this Scoping Report (see **Chapters 2 - 10**). It should be noted that the ordering of the SA Objectives does not infer any prioritisation.
- 12.2.3 The SA Framework for the WLP is derived from the SA Framework that was developed as part of the SA process to support the draft BCP. There are a number of planning issues, cross-boundary factors and key issues for the Black Country Authorities that remain relevant and appropriate for Wolverhampton, which are reflected in the proposed SA Objectives and indicators as set out in **Appendix B**.
- 12.2.4 A summary of the SA Objectives for the WLP is presented in **Table 12.1**.

Table 12.1: SA Objectives for the WLP

	SA Objective	SEA Regulations topics (Schedule 2)
1	Cultural heritage	Cultural heritage
2	Landscape	Landscape and cultural heritage
3	Biodiversity, flora, fauna and geodiversity	Biodiversity, flora and fauna
4	Climate change mitigation	Climatic factors
5	Climate change adaptation	Climatic factors, soil and water
6	Natural resources	Soil and water
7	Pollution	Air, water, soil and human health
8	Waste	Population and material assets
9	Transport and accessibility	Climatic factors, population and material assets
10	Housing	Population
11	Equality	Population
12	Health	Health and population
13	Economy	Population
14	Education, skills and training	Population

13 Subsequent stages to be carried out

13.1 Background

13.1.1 This chapter summarises the stages of, and approach to, the processes that will be carried out for the WLP following consultation at the scoping stage. Where appropriate, the assessment methods to be used have been included.

13.2 Refining options and assessing effects

13.2.1 The assessment of options (or alternatives) is an important requirement of the SEA Regulations, which requires the Environmental Report to include the following information about reasonable alternatives:

13.2.2 *"an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information".*

13.2.3 Reasonable alternatives will be assessed through the SA process, and the assessment of alternatives will take place following consultation on the Scoping Report. This will enable options for the WLP to be explored. Whilst this report would not be a requisite of the SEA Regulations, a report of this nature can help demonstrate iteration between the plan making process and the SA and provide a coherent story of the WLP's evolution and choice of options.

13.3 Sustainability Appraisal and Publication/Submission

13.3.1 The next stage of the SA will involve assessing the WLP Issues and Preferred Options. In terms of the assessment methodology, an assessment of all policies and proposals presented in the WLP will be undertaken. Findings from the assessment will be presented in a single-line matrix format. The high-level matrix is not a conclusive tool or model. Its main function is to identify at a strategic level whether or not the assessment requires a more detailed examination or whether satisfactory conclusions may be drawn from the high-level assessment without the need for further (time consuming) detailed analysis of a particular policy.

13.3.2 The assessment of policies and options will include:

- A description of the predicted effect;
- The duration of the effect: whether the effect is long, medium or short term;
- The frequency of the effect;
- Whether the effect is temporary or permanent;
- The geographic significance: whether the effect is of local, regional, national or international significance;

- The magnitude of effect;
- The severity of significance; and
- Whether mitigation is required/possible to reduce the effect.

13.3.3 As required by the SEA Regulations, cumulative, indirect and synergistic effects will also be identified and evaluated during the assessment. An explanation of these is as follows:

- **Cumulative effects** arise where several developments each have insignificant effects but together have a significant effect, or where several individual effects of the WLP have a combined effect.
- **Indirect effects** are effects that are not a direct result of the WLP but occur away from the original effect or as a result of a complex pathway.
- **Synergistic effects** interact to produce a total effect greater than the sum of the individual effects.

13.3.4 The assessment of these effects will be presented in tabular format and show where the different effects arise when two or more draft policies operate together.

13.3.5 Wherever possible, throughout the appraisal process, GIS will be used as an analytical tool to examine the spatial distribution of identified effects.

13.3.6 Following consultation on the Regulation 18 Issues and Preferred Options SA Report, any amendments that are made to the WLP will be appraised before preparing the final version of the SA Report to accompany the Publication (Regulation 19) version of the WLP.

Appendix A: Plan, Policy and Programme Review

A.1	Accessibility and transport	A1
A.2	Air	A6
A.3	Biodiversity, flora and fauna	A8
A.4	Climatic factors	A14
A.5	Cultural heritage.....	A18
A.6	Human health	A21
A.7	Landscape.....	A25
A.8	Population and material assets.....	A27
A.9	Soil	A33
A.10	Water	A34

A.1 Accessibility and transport

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to accessibility and transport
National Planning Policy Framework (2021) ¹	<p>The National Planning Policy Framework (NPPF) seeks to streamline the planning system and sets out the government’s planning policies and how these should be applied. At the heart of the NPPF is presumption in favour of sustainable development.</p> <p>The NPPF includes guidance on promoting sustainable transport. The NPPF requires development plans to seek to reduce greenhouse gas emissions and congestion, reduce the need to travel, and exploit opportunities for the sustainable movement of people and goods. Transport should be considered from the earliest stages of plan-making and development proposals so that:</p> <ul style="list-style-type: none"> • the potential impacts of development on transport networks can be addressed; • opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated; • opportunities to promote walking, cycling and public transport use are identified and pursued; • the environmental impacts of traffic and transport infrastructure can be identified, assessed and considered – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and • patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.
Department for Transport: Transport White Paper: The Future of Transport – A Network for 2030 (2004) ²	Sets out factors that will shape transport in the UK over the next thirty years. Also sets out how the Government will respond to the increasing demand for travel, while minimising the negative impact on people and the environment.
HM Government: The Road to Zero (2018)	This report outlines the transition to zero-emission road transport. This includes measures to reduce emissions from vehicles including specific targets for Heavy Goods Vehicles (HGVs), promoting low- and zero- emission cars and developing high quality electric vehicle infrastructure networks.
Department for Transport: Towards a Sustainable	Outlines five national goals for transport, focusing on the challenge of delivering strong economic growth while at the same time reducing

¹ MHCLG (2021) National Planning Policy Framework. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf [Date accessed: 26/10/22]

² Department for Transport: Transport White Paper: The Future of Transport – A Network for 2030 (2004) Available at:

<https://webarchive.nationalarchives.gov.uk/ukgwa/+http://www.dft.gov.uk/about/strategy/whitepapers/previous/fot/> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to accessibility and transport
Transport System: Supporting Economic Growth in a Low Carbon World (2008) ³	<p>greenhouse gas emissions. It outlines the key components of national infrastructure, discusses the difficulties of planning over the long term in the context of uncertain future demand and describes the substantial investments we are making to tackle congestion and crowding on transport networks. The National Goals for Transport are as follows:</p> <p>Goal 1: To reduce transport’s emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change.</p> <p>Goal 2: To support economic competitiveness and growth, by delivering reliable and efficient transport networks.</p> <p>Goal 3: To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society.</p> <p>Goal 4: To contribute to better safety, security and health and longer life expectancy by reducing the risk of death, injury or illness arising from transport, and by promoting travel modes that are beneficial to health.</p> <p>Goal 5: To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.</p>
Department for Transport: The Future of Rail White Paper (2004) ⁴	Sets out a blueprint for a new streamlined structure for Britain’s Railway. The proposals aim to provide a single point of accountability for the network’s performance, allow closer working between track and train and provide for greater devolution of decision-making.
Department for Transport: An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour (2006) ⁵	Summary report of the findings of an evidence base review investigating the research base on public attitudes towards climate change and transport behaviour.
Cycling and walking plan for England (2020) ⁶	<p>The ‘Gear change: a bold vision for cycling and walking’ document sets out a vision for a travel revolution in England’s streets, towns and communities. The plan sets out the multiple benefits of increased cycling and walking including health, congestion, the economy and air quality, and the vision that “<i>cycling and walking will be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030</i>”. The plan sets out four main themes to achieve this vision:</p> <ul style="list-style-type: none"> • Theme 1: Better streets for cycling and people;

³ Department for Transport: Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228953/7226.pdf [Date accessed: 26/10/22]

⁴ Department for Transport: The Future of Rail White Paper (2004) Available at: <https://researchbriefings.files.parliament.uk/documents/SN03142/SN03142.pdf> [Date accessed: 02/09/21]

⁵ Department for Transport: An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour (2006) Available at: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.180.9540&rep=rep1&type=pdf> [Date accessed: 26/10/22]

⁶ Department for Transport (2020) Cycling and walking plan for England. Available at: <https://www.gov.uk/government/publications/cycling-and-walking-plan-for-england> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to accessibility and transport
	<ul style="list-style-type: none"> • Theme 2: Cycling at the heart of decision-making; • Theme 3: Empowering and encouraging Local Authorities; and • Theme 4: Enabling people to cycle and protecting them when they do.
Secretary of State for Transport (2013) Aviation Policy Framework ⁷	<p>This document will fully replace the 2003 Air Transport White Paper as government’s policy on aviation, alongside any decisions Government makes following the recommendations of the independent Airports Commission. Key aims of this document includes:</p> <ul style="list-style-type: none"> • To ensure that the UK’s air links continue to make it one of the best connected countries in the world. This includes increasing our links to emerging markets so that the UK can compete successfully for economic growth opportunities; • To ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions; • To limit and where possible reduce the number of people in the UK significantly affected by aircraft noise; and • To encourage the aviation industry and local stakeholders to strengthen and streamline the way in which they work together.
Movement for Growth: the West Midlands Strategic Transport Plan ⁸	<p>The Movement for Growth Strategy is based on the West Midlands Combined Authority’s Strategic Economic Plan (SEP) and seeks to create a modern, efficient and reliable transport system. The Movement for Growth document is accompanied by a 10-year delivery plan which outlines key supporting transport projects that will deliver many of the SEP’s outcomes over the coming decade.</p> <p>The vision for transport in the West Midlands Metropolitan Area is: “<i>We will make great progress for a Midlands economic ‘Engine for Growth’, clean air, improved health and quality of life for the people of the West Midlands. We will do this by creating a transport system befitting a sustainable, attractive and economically vibrant conurbation in the world’s sixth largest economy</i>”.</p>
West Midlands Local Transport Plan Green Paper: Reimagining transport in the West Midlands: Local Transport Plan Draft Core Strategy (2021) ⁹	<p>The proposed Core Strategy for the fifth LTP for the West Midlands sets out the overall aims, vision and approach to guide the development and delivery of transport policies until the end of 2041. It seeks to:</p> <ul style="list-style-type: none"> • Sustain economic success • Create a fairer society • Support local communities and places • Become more active • Tackle the climate emergency

⁷ Secretary of State for Transport (2013) Aviation Policy Framework Available at: <https://www.gov.uk/government/publications/aviation-policy-framework> [Date accessed: 26/10/22]

⁸ West Midlands Combined Authority (no date) Movement for Growth: The West Midlands Strategic Transport Plan. Available at: <https://www.tfwm.org.uk/media/3ukj3yw0/movement-for-growth.pdf> [Date accessed: 26/10/22]

⁹ Transport for West Midlands (2021) Reimagining transport in the West Midlands: Local Transport Plan Draft Core Strategy. Available at: <https://www.tfwm.org.uk/media/icyfrghp/wm-ltp-core-strategy-v0-7.pdf> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to accessibility and transport
	The emerging fifth Local Transport Plan for the West Midlands will replace the Movement for Growth Strategy, when adopted.
Transport for West Midlands: Congestion Management Plan ¹⁰	<p>The Congestion Management Plan aims to:</p> <ol style="list-style-type: none"> 1. Tackle congestion hotspots through further investment in roads 2. Push for greater traffic management powers, including moving traffic offences 3. Invest in technology to help monitor performance and manage traffic 4. Deliver a regional transport coordination centre for all modes in partnership with local authorities, Highways England and West Midlands Police to manage incidents/major events 5. Invest in road safety and work with the Police and Crime Commissioner to manage road incidents more efficiently 6. Continue to build capacity into the public transport networks 7. Invest in communication and information tools and become a trusted source of travel advice 8. Coordinate the delivery of the transport investment programme and minimise impact through collaboration with the Resilience Partnership 9. Make better use of the M6 Toll 10. Deliver a travel demand action plan to encourage residents and businesses to re-mode, re-route, re-time or remove some journeys.
A step in the right direction: Wolverhampton transport plan in response to COVID-19 (2020) ¹¹	<p>The City Council has set out three main objectives to make way for safer streets for residents and visitors:</p> <ul style="list-style-type: none"> • Prioritising public safety and maintaining social distancing as part of COVID-19. • Redesigning public spaces to accommodate and encourage more walking and cycling • Reducing emissions as part of the Climate Emergency <p>To meet these objectives, the council has outlined a range of measures to be carried out as soon as possible, including:</p> <ul style="list-style-type: none"> • Widening footways • Relocating bus stops • Reducing speed limits • Creating more bike parking spaces and bike lanes • Trialing e-scooters

¹⁰ Transport for West Midlands (no date) Congestion Management Plan. Available at: https://www.tfwm.org.uk/media/oxfyfpvz/tfwm_cm-plan-aw_v3_lr_spreads.pdf [Date accessed: 26/10/22]

¹¹ City of Wolverhampton Council (2020) A step in the right direction: Wolverhampton transport plan in response to COVID-19. Available at: <https://www.wolverhampton.gov.uk/sites/default/files/2020-08/2020-06-05%20Transport%20Plan%20-%20a%20step%20in%20the%20right%20direction%20FINAL.pdf> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to accessibility and transport
Draft Active Travel Strategy for Wolverhampton (2009) ¹²	<p>This document sets out how the Council will ensure that there is a co-ordinated approach to providing the physical infrastructure, information and support that will generate the necessary behaviour change required to increase the levels of walking and cycling in Wolverhampton, particularly for shorter journeys.</p> <p>This Active Travel Strategy provides a framework to put the steps in place to:</p> <ol style="list-style-type: none"> 1. To improve our health by encouraging more active lifestyle choices. 2. Create an inviting, safe and interconnected network of walking and cycling networks. 3. To support and encourage more sustainable travel choices, such as widely providing travel planning, bicycle training and route information.

¹² AECOM (2009) Wolverhampton City Council Draft Active Travel Strategy. Available at:

<https://wolverhampton.moderngov.co.uk/documents/s14929/Draft%20Active%20Travel%20Strategy%20final.pdf> [Date accessed: 26/10/22]

A.2 Air

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to air
EC Air Quality Directive (1996) ¹³	Aims to improve air quality throughout Europe by controlling the level of certain pollutants and monitoring their concentrations. In particular, the Directive aims to establish levels for different air pollutants; draw up common methods for assessing air quality; methods to improve air quality; and make sure that information on air quality is easily accessible to Member States and the public.
Clean Air Strategy (2019) ¹⁴	This Clean Air Strategy sets out how the Government will tackle all sources of air pollution, making air healthier to breathe, protecting nature and boosting the economy. The strategy includes targets such as a commitment to reduce PM2.5 concentrations across the UK, so that the number of people living in locations above the World Health Organisation (WHO) guideline level of 10 µg/m ³ is reduced by 50% by 2025.
National Planning Policy Framework (2021) ¹⁵	The NPPF states that plans should prevent development from contributing to, or being put at risk of, air or water pollution. Plans should consider the presence of Air Quality Management Areas and cumulative impacts on air quality from individual sites in local areas.
A Green Future: Our 25 Year Plan to Improve the Environment (2018) ¹⁶	<p>The document sets out Government action to help achieve natural world regain and retain good health.</p> <p>The main goals of the Plan are to achieve:</p> <ul style="list-style-type: none"> • Clean air; • Clean and plentiful water; • Thriving plants and wildlife; • A reduced risk of harm from environmental hazards such as flooding and drought; • Using resources from nature more sustainably and efficiently; and • Enhanced beauty, heritage and engagement with the natural environment. <p>The Plan seeks to achieve clean air by:</p> <ul style="list-style-type: none"> • Meeting legally binding targets to reduce emissions of five damaging air pollutants. This should halve the effects of air pollution on health by 2030;

¹³ EC Air Quality Directive (1996) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31996L0062&from=ES> [Date accessed: 26/10/22]

¹⁴ DEFRA et al. (2019) Clean Air Strategy 2019. Available at: <https://www.gov.uk/government/publications/clean-air-strategy-2019> [Date accessed: 26/10/22]

¹⁵ MHCLG (2021) National Planning Policy Framework Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 26/10/22]

¹⁶ DEFRA (2021) A Green Future: Our 25 Year Plan to Improve the Environment. Available at: <https://www.gov.uk/government/publications/25-year-environment-plan> [Date accessed: 11/01/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to air
	<ul style="list-style-type: none"> • Ending the sale of new conventional petrol and diesel cars and vans by 2040; and • Maintaining the continuous improvement in industrial emissions by building on existing good practice and the successful regulatory framework. <p>The 2021 Environment Act (9th November, 2021) embeds several of these aspects into the new legislation.</p>
City of Wolverhampton Council 2019 Air Quality Annual Status Report (ASR) (2020) ¹⁷	<p>The ASR summarises actions to improve air quality that have been taken, and will be taken, in Wolverhampton AQMA. This includes:</p> <ul style="list-style-type: none"> • road improvements, • public transport improvements, • bus route improvements, • traffic management, • promoting travel alternatives, • promoting low emission vehicles, • air quality planning and guidance. <p>Data from 2018 has indicated that there are 3 areas within the city which are exceeding the annual NO₂ air quality objective. Defra's PCM model has identified 4 road links where the objective is being exceeded and in the case of Ring Road St David's (Road link 28464) will continue to do so till 2021.</p>
Emerging Wolverhampton Air Quality Management Action Plan	<p>The Air Quality Action Plan, which is currently being updated, includes 23 proposed actions which aim to improve the air quality in Wolverhampton. These actions are listed under the following headings:</p> <ul style="list-style-type: none"> • reducing vehicle emissions • improving public transport • improving the road network • measures to reduce traffic volumes • reducing air pollution from industry, commerce and residential areas • changing levels of travel demand/ promotion of alternative modes of transport

¹⁷ City of Wolverhampton Council (2020) 2019 Air Quality Annual Status Report (ASR): February 2020. Available at: <https://www.wolverhampton.gov.uk/sites/default/files/2020-02/Air%20Pollution%20Report%202019.pdf> [Date accessed: 26/10/22]

A.3 Biodiversity, flora and fauna

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to biodiversity, flora and fauna
UN Convention on Biological Diversity (1992) ¹⁸	The aims of the Convention include the conservation of biological diversity (including a commitment to significantly reduce the current rate of biodiversity loss), the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.
Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) ¹⁹	The Convention seeks to conserve wild flora and fauna and their natural habitats, and to monitor and control endangered and vulnerable species.
Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992 (the Habitats Directive) ²⁰	<p>The main aim of the Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those habitats and species of European importance. In applying these measures Member States are required to take account of economic, social and cultural requirements, as well as regional and local characteristics.</p> <p>The provisions of the Directive require Member States to introduce a range of measures, including:</p> <ul style="list-style-type: none"> • Maintain or restore European protected habitats and species listed in the Annexes at a favourable conservation status as defined in Articles 1 and 2; • Contribute to a coherent European ecological network of protected sites by designating Special Areas of Conservation (SACs) for habitats listed on Annex I and for species listed on Annex II. These measures are also to be applied to Special Protection Areas (SPAs) classified under Article 4 of the Birds Directive. Together SACs and SPAs make up the Natura 2000 network (Article 3); • Ensure conservation measures are in place to appropriately manage SACs and ensure appropriate assessment of plans and projects likely to have a significant effect on the integrity of an SAC. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest. In such cases compensatory measures are necessary to ensure the overall coherence of the Natura 2000 network (Article 6); • Member States shall also endeavour to encourage the management of features of the landscape that support the Natura 2000 network (Articles 3 and 10);

¹⁸ UN Convention on Biological Diversity (1992) Available at: <https://www.cbd.int/doc/legal/cbd-en.pdf> [Date accessed: 26/10/22]

¹⁹ Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) Available at: <https://rm.coe.int/1680078aff> [Date accessed: 26/10/22]

²⁰ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31992L0043> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to biodiversity, flora and fauna
	<ul style="list-style-type: none"> • Undertake surveillance of habitats and species (Article 11); • Ensure strict protection of species listed on Annex IV (Article 12 for animals and Article 13 for plants). • Report on the implementation of the Directive every six years (Article 17), including assessment of the conservation status of species and habitats listed on the Annexes to the Directive.
The Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations) ²¹	This transposes into national law the Habitats Directive and also consolidates all amendments that have been made to the previous 1994 Regulations. This means that competent authorities have a general duty in the exercise of any of their functions to have regard to the Directive.
A Green Future: Our 25 Year Plan to Improve the Environment (2018) ²²	<p>The document sets out government action to help achieve natural world regain and retain good health.</p> <p>The main goals of the Plan are to achieve:</p> <ul style="list-style-type: none"> • Clean air; • Clean and plentiful water; • Thriving plants and wildlife; • A reduced risk of harm from environmental hazards such as flooding and drought; • Using resources from nature more sustainably and efficiently; and • Enhanced beauty, heritage and engagement with the natural environment. <p>The Environment Act (2021) embeds several of these aspects into new legislation.</p>
DEFRA: Biodiversity 2020: A strategy for England’s wildlife and ecosystem services (2011) ²³	<p>The England biodiversity strategy 2020 ties in with the EU biodiversity strategy in addition to drawing links to the concept of ecosystem services. The strategy’s vision for England is: <i>“By 2050 our land and seas will be rich in wildlife, our biodiversity will be valued, conserved, restored, managed sustainably and be more resilient and able to adapt to change, providing essential services and delivering benefits for everyone”</i>.</p> <p>The Strategy’s overall mission is: <i>“to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people”</i>.</p>

²¹ The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations) Available at: <https://www.legislation.gov.uk/ukxi/2017/1012/contents/made> [Date accessed: 26/10/22]

²² A Green Future: Our 25 Year Plan to Improve the Environment Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf [Date accessed: 26/10/22]

²³ DEFRA (2011). Biodiversity 2020: A strategy for England’s wildlife and ecosystem services (2011) Available at: <https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to biodiversity, flora and fauna
TCPA: Biodiversity by Design: A Guide for Sustainable Communities (2004) ²⁴	The development process should consider ecological potential of all areas including both greenfield and brownfield sites. Local authorities and developers have a responsibility to mitigate impacts of development on designated sites and priority habitats and species and avoid damage to ecosystems.
National Planning Policy Framework (2021) ²⁵	<p>The updated NPPF seeks to streamline the planning system and sets out the government’s planning policies and how these should be applied. At the heart of the NPPF is presumption in favour of sustainable development.</p> <p>The NPPF includes guidance on promoting the conservation and enhancement of the natural environment. It requires the planning system to contribute to and enhance the natural and local environment by:</p> <ul style="list-style-type: none"> • protecting and enhancing valued landscapes, geological conservation interests and soils; • recognising the wider benefits of ecosystem services; • minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; • preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and • remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
Making Space for Nature: a review of England’s wildlife sites and ecological network (2010) ²⁶	<p>The Making Space for Nature report, which investigated the resilience of England’s ecological network to multiple pressures, concluded that England’s wildlife sites do not comprise of a coherent and resilient ecological network. The report advocates the need for a step change in conservation of England’s wildlife sites to ensure they are able to adapt and become part of a strong and resilient network. The report summarises what needs to be done to improve England’s wildlife sites to enhance the resilience and coherence of England’s ecological network in four words; more, bigger, better, and joined. There are five key approaches which encompass these, which also take into account of the land around the ecological network:</p> <ul style="list-style-type: none"> • Improve the quality of current sites by better habitat management. • Increase the size of current wildlife sites. • Enhance connections between, or join up, sites, either through physical corridors, or through ‘stepping stones’. • Create new sites.

²⁴ TCPA: Biodiversity by Design: A Guide for Sustainable Communities (2004) Available at:

https://library.uniteddiversity.coop/Ecovillages_and_Low_Impact_Development/Biodiversity%20by%20Design.pdf [Date accessed: 26/10/22]

²⁵ MHCLG (2021) National Planning Policy Framework Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 26/10/22]

²⁶ Making Space for Nature: a review of England’s wildlife sites and ecological network (2010) Available at: <https://www.gov.uk/government/news/making-space-for-nature-a-review-of-englands-wildlife-sites-published-today> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to biodiversity, flora and fauna
	<ul style="list-style-type: none"> • Reduce the pressures on wildlife by improving the wider environment, including through buffering wildlife sites.
The England Trees Action Plan 2021-2024 (2021) ²⁷	The Trees Action Plan sets out how the Government will tackle the challenges of biodiversity loss and climate change, in line with the goals of the 25 Year Environment Plan. The plan provides a strategic framework for implementing the Nature for Climate Fund and outlines over 80 policy actions the government is taking over this Parliament to help deliver this vision. Planting vastly more trees in England, and protecting and improving our existing woodlands, will be key to the government’s plan to achieve net zero and to create a Nature Recovery Network across the length of England.
The Natural Choice: Securing the Value of Nature. The Natural Environment White Paper. (HM Government 2011) ²⁸	Published in June 2011, the Natural Environment White paper sets out the government’s plans to ensure the natural environment is protected and fully integrated into society and economic growth. The White Paper sets out four key aims: <ul style="list-style-type: none"> • Protecting and improving our natural environment; • Growing a green economy; • Reconnecting people and nature; and • International and EU leadership.
CABE Making Contracts Work for Wildlife: How to Encourage Biodiversity in Urban Parks (2006) ²⁹	Advises on how to make the most of the potential for biodiversity in urban parks and it shows how the commitment of individuals and employers can make the difference between failure and inspiring success.
Birmingham and the Black Country Biodiversity Action Plan (2010) ³⁰	The vision for the Birmingham and Black Country Biodiversity Action Plan is to create “ <i>A diverse and natural Birmingham and Black Country, where we are connected to our wildlife and landscape; healthy, sustainable communities and local livelihoods, working with nature and securing its future</i> ”. They key aims of this action plan are to: <ul style="list-style-type: none"> • Maintain and increase the biodiversity of key sites and landscapes through appropriate protection and management. • Restore degraded habitats and key species populations by restoring key areas. • Link key areas with ecological corridors to reconnect wildlife populations and make them less vulnerable.

²⁷ DEFRA (2021) England Trees Action Plan 2021 to 2024. Available at: <https://www.gov.uk/government/publications/england-trees-action-plan-2021-to-2024> [Date accessed: 26/10/22]

²⁸ The Natural Choice: Securing the Value of Nature. The Natural Environment White Paper. (HM Government 2011) Available at: <https://www.gov.uk/government/publications/the-natural-choice-securing-the-value-of-nature> [Date accessed: 26/10/22]

²⁹ CABE Making Contracts Work for Wildlife: How to Encourage Biodiversity in Urban Parks Available at: <http://downloads.gigl.org.uk/website/making-contracts-work-for-wildlife.pdf> [Date accessed: 26/10/22]

³⁰ The Birmingham and Black Country Biodiversity LBAP Review Group (2010) Birmingham and the Black Country Biodiversity Action Plan 2010. Available at: <https://www.bbcwildlife.org.uk/sites/default/files/2018-10/bbcapfinal2010.pdf> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to biodiversity, flora and fauna
	<ul style="list-style-type: none"> Promote and support the use of the natural environment to mitigate against, and adapt to, the effects of climate change. Enable the sustainable use of the natural environment to benefit health and wellbeing of residents, workers and visitors as well as improving the local economy.
An Ecological Evaluation of the Black Country Green Belt (2019) ³¹	<p>The Ecological Evaluation of the Black Country Green Belt was prepared to inform the review of the former Black Country Plan. Although this is no longer being pursued, the study provides evidence base information relating to the geographic area including the Wolverhampton Local Plan.</p> <p>The primary output of the ecological evaluation is a GIS data set which assigns ecological value to individual landscape units through analysis and interpretation of a number of relevant data sets. The evaluation can be used in the following ways:</p> <ul style="list-style-type: none"> Informs the prioritisation of ecological field survey and statutory and non-statutory site assessment. Contributes to the defining of the ecological network of the Black Country Green Belt and beyond at a high resolution, and the identification of the component parts of a Black Country Nature Recovery Network. Can be utilised to inform more effective nature conservation project targeting and delivery. Can be utilised to inform the targeting of future agricultural environmental stewardship schemes. Can be utilised to inform the targeting and delivery of Biodiversity Net Gain through the planning system. Is a key data set to be analysed (in conjunction with others) as part of the proposed West Midlands Combined Authority Natural Capital Investment Strategy.
Tree and Woodland Strategy for Wolverhampton (2020) ³²	<p>Wolverhampton’s Vision for Trees and Woodlands is of a City with an increasing stock of trees, hedges and woodlands which:</p> <ul style="list-style-type: none"> Help to mitigate and to adapt to climate change in line with the Council’s declaration of a Climate Emergency Help to improve air quality and public health Are an integral part of the City’s identity and environment, earning it a reputation for high quality in its open spaces, highways and other public realm as well as across its centres, residential and business areas Help to support regeneration and attract investment Support health and wellbeing and social inclusion through their accessibility to all members of the community wherever they live, learn, work, play or shop Are well-managed, healthy, widespread and diverse with trees of a range of species and of all ages and sizes

³¹ EcoRecord (2019) An Ecological Evaluation of the Black Country Green Belt, October 2019. Available at: <https://blackcountryplan.dudley.gov.uk/media/13896/an-ecological-evaluation-of-the-black-country-green-belt-final-report-2019-redacted.pdf> [Date accessed: 26/10/22]

³² City of Wolverhampton Council (2020) Tree and Woodland Strategy for Wolverhampton 2019-2029. January 2020. Available at: <https://wolverhampton.moderngov.co.uk/documents/s135536/Appendix%20%20Tree%20and%20Woodland%20Strategy.pdf> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to biodiversity, flora and fauna
	<ul style="list-style-type: none"><li data-bbox="622 236 1921 268">• Promote biodiversity by providing habitat for a range of species and forming an important form of green infrastructure

A.4 Climatic factors

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to climatic factors
UN Framework Convention on Climate Change (1992) ³³	Sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change.
IPCC Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997) ³⁴	Commits member nations to reduce their emissions of carbon dioxide and other greenhouse gases, or engage in emissions trading if they maintain or increase emissions of these gases.
EC Sixth Environmental Action Programme Community 2002-2012 (2002) ³⁵	Climate change has been identified as one of four priority areas for Europe. The EAP's main objective is a reduction in emissions of greenhouse gases without a reduction in levels of growth and prosperity, as well as adaptation and preparation for the effects of climate change.
EU Sustainable Development Strategy (2006) ³⁶	This Strategy identifies key priorities for an enlarged Europe. This includes health, social inclusion and fighting global poverty. It aims to achieve better policy integration in addressing these challenges, and to ensure that Europe looks beyond its boundaries in making informed decisions about sustainability. The Sustainable Development Strategy was review in 2009 and " <i>underlined that in recent years the EU has mainstreamed sustainable development into a broad range of its policies. In particular, the EU has taken the lead in the fight against climate change and the promotion of a low-carbon economy. At the same time, unsustainable trends persist in many areas and the efforts need to be intensified</i> ". Sustainable development is a key focus of the EU and the strategy continues to be monitored and reviewed.
UK Renewable Energy Strategy (2009) ³⁷	The UK has committed to sourcing 15% of its energy from renewable sources by 2020 – an increase in the share of renewables from about 2.25% in 2008. The Renewable Energy Strategy sets out how the Government will achieve this target through utilising a variety of mechanisms to encourage Renewable Energy provision in the UK. This includes streamlining the planning system, increasing investment in technologies as well as improving funding for advice and awareness raising.

³³ UN Framework Convention on Climate Change (1992) Available at: <https://unfccc.int/resource/docs/convkp/conveng.pdf> [Date accessed: 26/10/22]

³⁴ IPCC Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997) Available at: <https://unfccc.int/resource/docs/convkp/kpeng.pdf> [Date accessed: 26/10/22]

³⁵ EC Sixth Environmental Action Programme Community 2002-2012 Available at: https://ec.europa.eu/environment/archives/action-programme/strategies_en.htm [Date accessed: 26/10/22]

³⁶ EU Sustainable Development Strategy (2006) Available at: <https://www.eea.europa.eu/policy-documents/renewed-eu-strategy-for-sustainable-development> [Date accessed: 26/10/22]

³⁷ UK Renewable Energy Strategy (2009) Available at: <https://www.gov.uk/government/publications/the-uk-renewable-energy-strategy> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to climatic factors
UK Renewable Energy Roadmap Update (2013) ³⁸	This is the second Update to the 2011 Renewable Energy Roadmap. It sets out the progress that has been made and the changes that have occurred in the sector over the past year. It also describes the continuing high ambitions and actions along with the challenges going forward.
The UK Low Carbon Transition Plan (2009) ³⁹	<p>The UK Low Carbon Transition Plan sets out how the UK will meet the Climate Change Act's legally binding target of 34 per cent cut in emissions on 1990 levels by 2020. It also seeks to deliver emissions cuts of 18% on 2008 levels. The main aims of the Transition Plan include the following:</p> <ul style="list-style-type: none"> • Producing 30% of energy from renewables by 2020; • Improving the energy efficiency of existing housing; • Increasing the number of people in 'green jobs'; and • Supporting the use and development of clean technologies.
National Planning Policy Framework (2012) ⁴⁰	<p>At the heart of the NPPF is presumption in favour of sustainable development.</p> <p>The NPPF includes guidance on climate change, flooding, and coastal change. Plans should take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development should be planned to avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure.</p> <p>To support the move to a low carbon future, planning authorities should:</p> <ul style="list-style-type: none"> • plan for new development in locations and ways which reduce greenhouse gas emissions; • actively support energy efficiency improvements to existing buildings; and • when setting any local requirement for a building's sustainability, do so in a way consistent with the government's zero carbon buildings policy and adopt nationally described standards. <p>Local plans should apply a sequential, risk-based approach to the location of development to avoid where possible flood risk to people and property and manage any residual risk, taking account of the impacts of climate change, by:</p> <ul style="list-style-type: none"> • applying the Sequential Test; • if necessary, applying the Exception Test;

³⁸ UK Renewable Energy Roadmap Update Available at: <https://www.gov.uk/government/publications/uk-renewable-energy-roadmap-second-update> [Date accessed: 26/10/22]

³⁹ The UK Low Carbon Transition Plan Available at: <https://www.gov.uk/government/publications/the-uk-low-carbon-transition-plan-national-strategy-for-climate-and-energy> [Date accessed: 26/10/22]

⁴⁰ MHCLG (2021) National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to climatic factors
	<ul style="list-style-type: none"> • safeguarding land from development that is required for current and future flood management; • using opportunities offered by new development to reduce the causes and impacts of flooding.
DfT An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour (2006) ⁴¹	Summary report of the findings of an evidence base review investigating the research base on public attitudes towards climate change and transport behaviour.
Carbon Trust: The Climate Change Challenge: Scientific Evidence and Implications (2005) ⁴²	This report summarises the nature of the climate change issue. It explains the fundamental science and the accumulating evidence that climate change is real and needs to be addressed. It also explains the future potential impacts, including the outstanding uncertainties.
Energy Saving Trust: Renewable Energy Sources for Homes in Urban Environments (2005) ⁴³	Provides information about the integration of renewable energy sources into new and existing dwellings in urban environments. It covers the basic principles, benefits, limitations, costs and suitability of various technologies.
Environment Agency, Adapting to Climate Change: A Checklist for Development (2005) ⁴⁴	The document contains a checklist and guidance for new developments to adapt to climate change. The main actions are summarised in a checklist.
Wolverhampton Renewable Energy and Climate Reduction Study (2011) ⁴⁵	The Renewable Energy and Climate Reduction Study was prepared by AMEC to assess opportunities for renewable and low carbon energy generation across Wolverhampton, to help inform the City Council's strategy. The study is also intended to inform local businesses, developers and communities about the roles they will play in delivery of renewable and low carbon energy.

⁴¹ DfT An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour Available at: <https://www.semanticscholar.org/paper/AN-EVIDENCE-BASE-REVIEW-OF-PUBLIC-ATTITUDES-TO-AND-Anable-Lane/8999edae2b20fca3fb5d70a0a3991cebe1be519d> [Date accessed: 26/10/22]

⁴² Carbon Trust: The Climate Change Challenge: Scientific Evidence and Implications Available at: <https://www.carbontrust.com/resources/the-climate-change-challenge> [Date accessed: 26/10/22]

⁴³ Energy Saving Trust: Renewable Energy Sources for Homes in Urban Environments Available at: https://www.buildingcentre.co.uk/media/_file/pdf/22220_pdf30.pdf [Date accessed: 26/10/22]

⁴⁴ Environment Agency, Adapting to Climate Change: A Checklist for Development Available at: https://www.ukcip.org.uk/wp-content/Wizard/Checklist_for_development.pdf [Date accessed: 26/10/22]

⁴⁵ AMEC (2011) Wolverhampton City Council Renewable Energy and Carbon Reduction Study: Final Report, December 2011. Available at: https://www.wolverhampton.gov.uk/sites/default/files/pdf/Wolverhampton_Renewable_Energy_and_Carbon_Reduction_Strategy.pdf [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to climatic factors
	<p>This Study is a starting point and a key priority for the City Council will be to disseminate the findings and promote the benefits associated with renewable and low carbon energy generation to local communities, businesses and developers.</p> <p>The Study presents a number of recommendations for the City Council and its partners, together with an action plan for delivery. The Study recommendations and supporting action plan identify the measures that the City Council and others will need to take to drive the take-up and realise the significant benefits associated with renewable and low carbon energy in Wolverhampton.</p>

A.5 Cultural heritage

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to cultural heritage
Council of Europe: Convention on the Protection of the Architectural Heritage of Europe (1985) ⁴⁶	Aims for signatories to protect their architectural heritage by means of identifying monuments, buildings and sites to be protected; preventing the disfigurement, dilapidation or demolition of protected properties; providing financial support by the public authorities for maintaining and restoring the architectural heritage on its territory; and supporting scientific research for identifying and analysing the harmful effects of pollution and for defining ways and means to reduce or eradicate these effects.
Council of Europe: The Convention on the Protection of Archaeological Heritage (Revised) (Valetta Convention) (1992) ⁴⁷	The convention defines archaeological heritage and identifies measures for its protection. Aims include integrated conservation of the archaeological heritage and financing of archaeological research and conservation.
National Planning Policy Framework (2021) ⁴⁸	<p>The updated NPPF seeks to streamline the planning system and sets out the government’s planning policies and how these should be applied. At the heart of the NPPF is presumption in favour of sustainable development.</p> <p>The NPPF includes guidance on conserving and enhancing the historic environment. It seeks to ensure local authorities plan recognise heritage assets as an irreplaceable resource and conserve them in a manner that reflects their significance.</p> <p>Planning authorities should take into account:</p> <ul style="list-style-type: none"> • The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; • The wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring; and • The desirability of new development making a positive contribution to local character and distinctiveness; and opportunities to draw on the contribution made by the historic environment to the character of a place.
English Heritage and CABE: Buildings in Context: New	Aims to stimulate a high standard of design when development takes place in historically sensitive contexts by showing 15 case studies in which achievement is far above the ordinary and trying to draw some lessons both about design and about the development and planning process, particularly regarding building in sensitive locations.

⁴⁶ Council of Europe: Convention on the Protection of the Architectural Heritage of Europe (1985). Available at: <https://www.coe.int/en/web/herein-system/council-of-europe> [Date accessed: 26/10/22]

⁴⁷ Council of Europe: The Convention on the Protection of Archaeological Heritage (Revised). Available at: <https://www.coe.int/en/web/herein-system/council-of-europe> [Date accessed: 26/10/22]

⁴⁸ MHCLG (2021) National Planning Policy Framework. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to cultural heritage
Development in Historic Areas (2002) ⁴⁹	
Historic England: Conservation Principles Policies and Guidance for the Sustainable Management of the Historic Environment (2008) ⁵⁰	<p>This Historic England document sets out the framework for the sustainable management of the historic environment. This is presented under the following six headline 'principles':</p> <p>Principle 1: The historic environment is a shared resource</p> <p>Principle 2: Everyone should be able to participate in sustaining the historic environment</p> <p>Principle 3: Understanding the significance of places is vital</p> <p>Principle 4: Significant places should be managed to sustain their values</p> <p>Principle 5: Decisions about change must be reasonable, transparent and consistent</p> <p>Principle 6: Documenting and learning from decisions is essential.</p>
Historic England: Tall Buildings: Historic England Advice Note 4 (2015) ⁵¹	<p>This Historic England Advice Note updates previous guidance by Historic England and CABE, produced in 2007. It seeks to guide people involved in planning for and designing tall buildings so that they may be delivered in a sustainable and successful way through the development plan and development management process. The advice is for all relevant developers, designers, local authorities and other interested parties.</p>
Historic England (2015) The Historic Environment in Local Plans, Historic Environment Good Practice Advice in Planning: 1 ⁵²	<p>Practice Advice note is to provide information to assist local authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the National Planning Policy Framework (NPPF) and the related guidance given in the National Planning Practice Guide (PPG).</p>
Historic England (2015) Managing Significance in	<p>The purpose of this Historic England Good Practice Advice note is to provide information</p>

⁴⁹ English Heritage and CABE: Buildings in Context: New Development in Historic Areas (2002). Available at: <https://www.designcouncil.org.uk/sites/default/files/asset/document/building-in-context-new-development-in-historic-areas.pdf> [Date accessed: 26/10/22]

⁵⁰ Historic England: Conservation Principles Policies and Guidance for the Sustainable Management of the Historic Environment (2008). Available at: <https://historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/> [Date accessed: 26/10/22]

⁵¹ Historic England: Tall Buildings: Historic England Advice Note 4. Available at: <https://historicengland.org.uk/images-books/publications/tall-buildings-advice-note-4/> [Date accessed: 26/10/22]

⁵² Historic England (2015) The Historic Environment in Local Plans, Historic Environment Good Practice Advice in Planning: 1. Available at: <https://historicengland.org.uk/images-books/publications/gpa1-historic-environment-local-plans/> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to cultural heritage
Decision-Taking in the Historic Environment, Historic Environment Good Practice Advice in Planning: 2 ⁵³	in relation to assessing the significance of heritage assets, using appropriate expertise, historic environment records, recording and furthering understanding, neglect and unauthorised works, marketing and design and distinctiveness.
Historic England (2015) The Setting of Heritage Assets, Historic Environment Good Practice Advice in Planning: 3 ⁵⁴	This document sets out guidance, against the background of the National Planning Policy Framework (NPPF) and the related guidance given in the Planning Practice Guide (PPG), on managing change within the settings of heritage assets, including archaeological remains and historic buildings, sites, areas, and landscapes.
The Historic Environment and Site Allocations in Local Plans Historic England Advice Note 3 (2015) ⁵⁵	The purpose of this Historic England advice note is to support all those involved in the Local Plan site allocation process in implementing historic environment legislation, the relevant policy in the National Planning Policy Framework (NPPF) and the related guidance given in the Planning Practice Guide (PPG). In addition to these documents, this advice should be read in conjunction with the relevant Good Practice Advice and Historic England advice notes. Alternative approaches may be equally acceptable, provided they are demonstrably compliant with legislation and national policy objectives.
Black Country Historic Landscape Characterisation Study ⁵⁶	<p>The HLC aimed to create a strategic landscape-level understanding of the historic character and environment of the Black Country. The study identified 103 Historic Environment Area Designations (HEADs) within the Black Country Green Belt and 354 HEADs in the urban area. The study also identified a number of Archaeological Priority Areas, which are considered to contain particularly rare or well-preserved remains of high archaeological and historic interest.</p> <p>Areas of High Historic Townscape Value (AHHTVs) and Designed Landscapes of High Historic Value (DLHHVs) have also been identified within the Historic Landscape Characterisation.</p>

⁵³ Historic England (2015) Managing Significance in Decision-Taking in the Historic Environment, Historic Environment Good Practice Advice in Planning: 2. Available at: <https://historicengland.org.uk/images-books/publications/gpa2-managing-significance-in-decision-taking/> [Date accessed: 26/10/22]

⁵⁴ Historic England (2015) The Setting of Heritage Assets, Historic Environment Good Practice Advice in Planning: 3. Available at: <https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/> [Date accessed: 26/10/22]

⁵⁵ The Historic Environment and Site Allocations in Local Plans Historic England Advice Note 3 (2015). Available at: <https://historicengland.org.uk/images-books/publications/historic-environment-and-site-allocations-in-local-plans/> [Date accessed: 26/10/22]

⁵⁶ Oxford Archaeology (2019) Black Country Historic Landscape Characterisation Study. Available at: https://blackcountryplan.dudley.gov.uk/media/13895/comp_black-country-hlc-final-report-30-10-2019-lr_redacted.pdf [Date accessed: 26/10/22]

A.6 Human health

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to human health
DCMS: Playing to win: a new era for sport. (2008) ⁵⁷	The government's vision for sport and physical activity for 2012 and beyond is to increase significantly levels of sport and physical activity for people of all ages and to achieve sustained levels of success in international competition. The ambition is for England to become –a truly world leading sporting nation. The vision is to give more people of all ages the opportunity to participate in high quality competitive sport.
DoH: Healthy Lives, Healthy People: Our strategy for public health in England White Paper (2011) ⁵⁸	Sets out the government's approach to tackling threats to public health and dealing with health inequalities. It sets out an approach that will: <ul style="list-style-type: none"> • Protect the population from health threats – led by central government, with a strong system to the frontline; • Empower local leadership and encourage wide responsibility across society to improve everyone's health and wellbeing, and tackle the wider factors that influence it; • Focus on key outcomes, doing what works to deliver them, with transparency of outcomes to enable accountability through a proposed new public health outcomes framework; • Reflect the government's core values of freedom, fairness and responsibility by strengthening self-esteem, confidence and personal responsibility; positively promoting healthy behaviours and lifestyles; and adapting the environment to make healthy choices easier; and • Balance the freedoms of individuals and organisations with the need to avoid harm to others, use a 'ladder' of interventions to determine the least intrusive approach necessary to achieve the desired effect and aim to make voluntary approaches work before resorting to regulation.
Public Health Strategy 2020-2025 (2019) ⁵⁹	The strategy sets out priorities within the public health system and areas of focus including addressing health inequalities and narrowing the 'health gap' between poor and wealthy communities, reducing rates of infectious diseases, addressing unhealthy behaviours and ensuring the potential of new technologies is realised.
DoH & Department for Work and Pensions. Improving	This sets out the government's response to a review into the health of Britain's working age population conducted by Dame Carol Black. The vision is to: " <i>create a society where the positive links between work and health are recognised by all, where everyone aspires to a</i>

⁵⁷ DCMS (2008) Playing to win: a new era for sport Available at: http://www.lsera.org/old/news/sse/sportstrategies/DCMS_PlayingtoWin_singles.pdf [Date accessed: 26/10/22]

⁵⁸ DoH (2011) Healthy Lives, Healthy People: Our strategy for public health in England White Paper Available at: <https://www.gov.uk/government/publications/healthy-lives-healthy-people-our-strategy-for-public-health-in-england> [Date accessed: 26/10/22]

⁵⁹ Public Health England (2019) PHE Strategy 2020 to 2025 <https://www.gov.uk/government/publications/phe-strategy-2020-to-2025> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to human health
health and work: changing lives: The Government's Response to Dame Carol Black's Review of the health of Britain's working-age population (2008) ⁶⁰	<p><i>healthy and fulfilling working life and where health conditions and disabilities are not a bar to enjoying the benefits of work</i>'.</p> <p>To achieve the vision three key aspirations have been identified:</p> <ol style="list-style-type: none"> 1. creating new perspectives on health and work; 2. improving work and workplaces; and 3. supporting people to work. <p>Through these three aspirations Britain's working population will fulfil their full potential, create stronger communities and help relieve the financial burden of health problems on the economy.</p>
DoH: Our health, our care, our say: a new direction for community services (2006) ⁶¹	Puts emphasis on moving healthcare into the community and will therefore have an impact on sustainable development considerations, including supporting local economies and how people travel to healthcare facilities.
Forestry Commission: Trees and Woodlands – Nature's Health Service (2005) ⁶²	Provides detailed examples of how the Woodland Sector (trees, woodlands and green spaces) can significantly contribute to people's health, well-being (physical, psychological and social) and quality of life. Increasing levels of physical activity is a particular priority.
Accessible Natural Green Space Standards Towns and Cities: Review & Toolkit for Implementation (2003) ⁶³	Aims to help Local Authorities develop policies which acknowledge, protect and enhance the contribution natural spaces make to local sustainability. Three aspects of natural space in cities and towns are discussed: their biodiversity; their ability to cope with urban pollution; ensuring natural spaces are accessible to everyone.
Emerging Wolverhampton Playing Pitch Assessment and Action Plan (2022)	<p>The emerging assessment will replace and update the 2018 Playing Pitch Strategy Assessment Report (2018)⁶⁴ following Cabinet approval in November 2022.</p> <p>The 2018 report presents a supply and demand analysis of playing pitch facilities in accordance with Sport England's Playing Pitch Strategy Guidance: An approach to developing and delivering a playing pitch strategy. The assessment was originally delivered in September 2015 and has been updated (as part of the Stage E process) through a combination of desk-based research as well as</p>

⁶⁰ Improving health and work: changing lives. Available at: <https://www.gov.uk/government/publications/improving-health-and-work-changing-lives> [Date accessed: 26/10/22]

⁶¹ DoH (2006) Our health, our care, our say: a new direction for community services Available at: <https://www.gov.uk/government/publications/our-health-our-care-our-say-a-new-direction-for-community-services> [Date accessed: 26/10/22]

⁶² Forestry Commission (2005) Trees and Woodlands - Nature's Health Service Available at: <https://www.forestryresearch.gov.uk/publications/trees-and-woodlands-natures-health-service/> [Date accessed: 26/10/22]

⁶³ Accessible Natural Green Space Standards Towns and Cities: Review & Toolkit for Implementation Available at: <http://publications.naturalengland.org.uk/publication/65021> [Date accessed: 26/10/22]

⁶⁴ Knight, Kavanagh & Page (2018) Wolverhampton Playing Pitch Strategy Assessment Report, September 2015 (Updated March 2018). Available at: <https://www.wolverhampton.gov.uk/sites/default/files/2019-07/Wolverhampton%20Playing%20Pitch%20Strategy%20-%20Assessment%202018.pdf> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to human health
Wolverhampton Open Space Strategy and Action Plan Update (2018) ⁶⁵	<p>consultation with the Council, Sport England and National Governing Bodies of Sport (NGBs). It was carried out in order to update the supply and demand data whilst validating and adding new context to reflect key changes since the initial data was recorded.</p> <p>This Strategy and Action Plan sets out a strategic vision and a series of aims and objectives for open space in Wolverhampton of all types and ownerships. Based on these objectives and an assessment against quantity, quality and access standards a prioritised action plan is provided for different parts of the City for each type of open space. Over-arching actions for the whole City are also identified.</p> <p>The Strategy and Action Plan sets out a vision up to 2026, providing a strategic framework for the development and improvement of existing open space facilities. It aims to:</p> <ul style="list-style-type: none"> • Provide a clear prioritised action plan to protect and improve existing open spaces and to increase the provision of such facilities, where it is shown there are deficiencies against quantity, quality and access standards. This includes area-based action plans with implementation and funding sources. • Advise, as appropriate, on opportunities for rationalisation and change of use of current open space provision within the City. • Detail how CoWC can encourage greater community involvement and ownership in the management, maintenance and development of open spaces. • Recommend how to maximise the effective use of physical and financial resources in improving the quantity, quality and accessibility of open space • Advise on best practise in terms of delivery including stakeholder and partnership working, marketing and communication improvements. • Establish a robust monitoring framework to assess the effectiveness of the Strategy and Action Plan. <p>The Open Space Strategy is currently being updated and will be complete in 2023.</p>
Wolverhampton Joint Health and Wellbeing Strategy 2013-2018 ⁶⁶	<p>The Wolverhampton Joint Health and Wellbeing Strategy sets the framework for supporting Wolverhampton residents' health and wellbeing. Measures include increasing resident's level of physical activity and encouraging healthier eating. The strategy sets out three 'themes' as follows: Growing well, living well and ageing well.</p> <p>The strategy sets out seven key priorities for Wolverhampton:</p> <ul style="list-style-type: none"> • Early years • Children and young people's mental wellbeing and resilience • Workforce • City Centre • Embedding prevention across the system • Integrated care; frailty and end of life

⁶⁵ Knight, Kavanagh & Page (2018) City of Wolverhampton Open Space Strategy and Action Plan Update, June 2018. Available at: https://www.wolverhampton.gov.uk/sites/default/files/pdf/Wolverhampton_OSSAP_Update_June_2018.pdf [Date accessed: 26/10/22]

⁶⁶ City of Wolverhampton Council (no date) Wolverhampton Joint Health & Wellbeing Strategy 2018-2023. Available at: <https://wolverhampton.moderngov.co.uk/documents/s80182/DRAFT%20Joint%20Health%20and%20Wellbeing%20Strategy%202018-23.pdf> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to human health
	<ul style="list-style-type: none"><li data-bbox="622 236 902 264">• Dementia friendly city

A.7 Landscape

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to landscape
Council of Europe: European Landscape Convention (2006) ⁶⁷	Aims to promote the protection, management and planning (including active design and creation of Europe’s landscapes, both rural and urban, and to foster European co-operation on landscape issues.
English Heritage and CABE: Guidance on Tall Buildings (2007) ⁶⁸	Provides advice and guidance on good practice in relation to tall buildings in the planning process and to highlight other related issues, which need to be taken into account, i.e. where tall buildings would and would not be appropriate.
National Planning Policy Framework (2021) ⁶⁹	The NPPF states that development could seek to promote or reinforce local distinctiveness; both aesthetic considerations and connections between people and places should be considered. The NPPF also promotes the protection and enhancements of valued landscapes, giving greatest weight to National Parks and Areas of Outstanding Natural Beauty.
MHCLG: National Design Guide: Planning practice guidance for beautiful, enduring and successful places (2021) ⁷⁰	This design guide illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice. It forms part of the government’s collection of planning practice guidance and should be read alongside the separate planning practice guidance on design process and tools.
Black Country Landscape Sensitivity Assessment (2019) ⁷¹	<p>The Landscape Sensitivity Study was prepared to inform the review of the former Black Country Plan. Although this is no longer being pursued, the study provides evidence base information relating to the geographic area including the Wolverhampton Local Plan.</p> <p>The purpose of this study is to provide an assessment of the extent to which the character and quality of the landscape abutting the West Midlands conurbation within the Black Country and around settlements in South Staffordshire is, in principle, susceptible to change as a result of introducing built development.</p>

⁶⁷ Council of Europe: European Landscape Convention (2006) Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/236096/8413.pdf [Date accessed: 26/10/22]

⁶⁸ English Heritage and CABE: Guidance on Tall Buildings (2007) Available at: https://www.designcouncil.org.uk/sites/default/files/asset/document/guidance-on-tall-buildings_0.pdf [Date accessed: 26/10/22]

⁶⁹ MHCLG (2021) National Planning Policy Framework Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 26/10/22]

⁷⁰ MHCLG & DLUHC (2021) National design guide. Available at: <https://www.gov.uk/government/publications/national-design-guide> [Date accessed: 26/10/22]

⁷¹ LUC (2019) Black Country Landscape Sensitivity Assessment. Available at: https://blackcountryplan.dudley.gov.uk/media/13883/black-country-lsa-front-end-report-final-lr_redacted.pdf [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to landscape
	The study highlights likely landscape and visual sensitivities within each assessment area and provides a broad landscape character based assessment rather than a site level assessment as might be required for a planning application.
Black Country Green Belt Study (2019) ⁷²	<p>The Green Belt Study was prepared to inform the review of the former Black Country Plan. Although this is no longer being pursued, the study provides evidence base information relating to the geographic area including the Wolverhampton Local Plan.</p> <p>The overall aim of the Study was to undertake an independent, robust and transparent assessment of Green Belt within the Black Country. This includes a comprehensive assessment of the performance of Green Belt land in line with policy set out in the National Planning Policy Framework (NPPF) good practice guidance, local plan examination inspectors' reports and case law. The Study draws out variations in the contribution of land to the five Green Belt purposes, identifying areas of land whose performance ranges from relatively weak to relatively strong in Green Belt terms.</p>

⁷² LUC (2019) Black Country Green Belt Study. Available at: https://blackcountryplan.dudley.gov.uk/media/13882/bcgb-0919-black-country-gb-stage-1-and-2-plus-app1-final-reduced_redacted.pdf [Date accessed: 26/10/22]

A.8 Population and material assets

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to population and material assets
National Planning Policy Framework (2021) ⁷³	<p>The NPPF seeks to streamline the planning system and sets out the government’s planning policies and how these should be applied. At the heart of the NPPF is presumption in favour of sustainable development. The NPPF includes guidance on promoting healthy communities.</p> <p>The NPPF requires planning authorities to aim to achieve places which promote:</p> <ul style="list-style-type: none"> • Opportunities for meetings between members of the community who might not otherwise come into contact with each other, including through mixed-use developments, strong neighbourhood centres and active street frontages which bring together those who work, live and play in the vicinity; • Safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and • Safe and accessible developments, containing clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas. <p>In order to deliver the social, recreational and cultural facilities and services the community needs, planning policies and decisions should:</p> <ul style="list-style-type: none"> • Plan positively for the provision and use of shared space, community facilities (such as local shops, meeting places, sports venues, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments; • Guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community’s ability to meet its day-to-day needs; • Ensure that established shops, facilities and services are able to develop and modernise in a way that is sustainable, and retained for the benefit of the community; and • Ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.
Social Exclusion Unit: Preventing Social Exclusion (2001) ⁷⁴	<p>The primary aims are to prevent social exclusion, and reintegrate people who have become excluded. Improvement is required in the areas of truancy, rough sleeping, teenage pregnancy, youth at risk and deprived neighbourhoods.</p>

⁷³ National Planning Policy Framework Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 26/10/22]

⁷⁴ Social Exclusion Unit: Preventing Social Exclusion (2001) Available at: <http://www.bris.ac.uk/poverty/downloads/keyofficialdocuments/Preventing%20Social%20Exclusion.pdf> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to population and material assets
DCLG Homes for the future: more affordable, more sustainable (2007) ⁷⁵	The Housing Green Paper outlines plans for delivering homes; new ways of identifying and using land for development; more social housing- ensuring that a decent home at an affordable price is for the many; building homes more quickly; more affordable homes; and greener homes – with high environmental standards and flagship developments leading the way.
ODPM & Home Office: Safer Places: The Planning System and Crime Prevention (2004) ⁷⁶	Practical guide to designs and layouts that may help with crime prevention and community safety, including well-defined routes, places structured so that different uses do not cause conflict, places designed to include natural surveillance and places designed with management and maintenance in mind.
Cabinet Office: Reaching Out: An Action Plan on Social Exclusion (2006) ⁷⁷	Sets out an action plan to improve the life chances of those who suffer, or may suffer in the future, from disadvantage. Guiding principles for action include: better identification and earlier intervention; systematically identifying 'what works'; promoting multi-agency working; personalisation, rights and responsibilities; and supporting achievement and managing underperformance.
EC Waste Framework Directive (1975, updated 2006) ⁷⁸	Objective is the protection of human health and the environment against harmful effects caused by the collection, transport, treatment, storage and tipping of waste. Particular focus is placed on the re-use of recovered materials as raw materials; restricting the production of waste; promoting clean technologies; and the drawing up of waste management plans.
EC Landfill Directive (1999) ⁷⁹	Aims to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole lifecycle of the landfill.
Cabinet Office: Waste Not, Want Not, A Strategy for tackling the waste problem (2002) ⁸⁰	A study into how England's current waste management practices could be improved to reduce the current, and growing, waste problem.

⁷⁵ DCLG Homes for the future: more affordable, more sustainable (2007) Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/243191/7191.pdf [Date accessed: 26/10/22]

⁷⁶ ODPM & Home Office: Safer Places: The Planning System and Crime Prevention Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7784/147627.pdf [Date accessed: 26/10/22]

⁷⁷ Cabinet Office: Reaching Out: An Action Plan on Social Exclusion Available at: https://www.bristol.ac.uk/poverty/downloads/keyofficialdocuments/reaching_out_full.pdf [Date accessed: 26/10/22]

⁷⁸ EC Waste Framework Directive Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31975L0442> [Date accessed: 26/10/22]

⁷⁹ EC Landfill Directive (1999) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31999L0031> [Date accessed: 26/10/22]

⁸⁰ Cabinet Office: Waste Not, Want Not, A Strategy for tackling the waste problem (2002) Available at: <https://statesassembly.gov.je/scrutinyreviewresearches/2007/s-6482-38840-1972007.pdf> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to population and material assets
DEFRA Waste Strategy for England (2007) ⁸¹	Aims are to reduce waste by making products with fewer natural resources; break the link between economic growth and waste growth; re-use products or recycle their materials; and recover energy from other wastes where possible. Notes that for a small amount of residual material, landfill will be necessary.
DECC Energy White Paper: Meeting the Energy Challenge (2007) ⁸²	Sets out government's long term energy policy, including requirements for cleaner, smarter energy; improved energy efficiency; reduced carbon emissions; and reliable, competitive and affordable supplies. The White Paper sets out the UK's international and domestic energy strategy, in the shape of four policy goals: <ol style="list-style-type: none"> 1) aiming to cut CO₂ emissions by some 60% by about 2050, with real progress by 2020; 2) maintaining the reliability of energy supplies; 3) promoting competitive markets in the UK and beyond; and 4) ensuring every home is heated adequately and affordably.
DTI Micro Generation Strategy (2006) ⁸³	Acknowledges that local authorities can be pro-active in promoting small-scale, local renewable energy generation schemes through " <i>sensible use of planning policies</i> ".
EU Sustainable Development Strategy (2006) ⁸⁴	This Strategy identifies key priorities for an enlarged Europe. This includes health, social inclusion and fighting global poverty. It aims to achieve better policy integration in addressing these challenges, and to ensure that Europe looks beyond its boundaries in making informed decisions about sustainability. The sustainable Development Strategy was reviewed in 2009 and " <i>underlined that in recent years the EU has mainstreamed sustainable development into a broad range of its policies. In particular, the EU has taken the lead in the fight against climate change and the promotion of a low-carbon economy. At the same time, unsustainable trends persist in many areas and the efforts need to be intensified</i> ". Sustainable development is a key focus of the EU and the strategy continues to be monitored and reviewed.
DEFRA, Noise Policy Statement for England (NPSE) (2010) ⁸⁵	This document seeks to clarify the underlying principles and aims in existing policy documents, legislation and guidance that relate to noise. The key aims of this document are as follows: <ul style="list-style-type: none"> • Avoid significant adverse impacts on health and quality of life; • Mitigate and minimise adverse impacts on health and quality of life; and • Where possible, contribute to the improvement of health and quality of life.

⁸¹ DEFRA Waste Strategy for England (2007) Available at: <https://www.gov.uk/government/publications/waste-strategy-for-england-2007> [Date accessed: 26/10/22]

⁸² DECC Energy White Paper: Meeting the Energy Challenge Available at: <https://www.gov.uk/government/publications/meeting-the-energy-challenge-a-white-paper-on-energy> [Date accessed: 26/10/22]

⁸³ DTI Micro Generation Strategy. Available at: <https://www.ofgem.gov.uk/sites/default/files/docs/2006/10/ofgem-microgen-next-steps-oct-2006.pdf> [Date accessed: 26/10/22]

⁸⁴ EU Sustainable Development Strategy (2006) Available at: <https://www.eea.europa.eu/policy-documents/renewed-eu-strategy-for-sustainable-development> [Date accessed: 26/10/22]

⁸⁵ DEFRA (2010) Noise Policy Statement for England (NPSE) Available at: <https://www.gov.uk/government/publications/noise-policy-statement-for-england> [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to population and material assets
Strategy for Sustainable Construction (2008) ⁸⁶	'Themes for Action' include: re-use existing built assets; design for minimum waste; aim for lean construction; minimise energy in construction; minimise energy in building use; avoid polluting the environment; preserve and enhance bio-diversity; conserve water resources; respect people and their local environment; and set targets (benchmarks & performance indicators).
Planning for Town Centres: Practice guidance on need, impact and the sequential approach (2009) ⁸⁷	This practice guidance was intended to support the implementation of town centre policies set out in Planning Policy Statement 4: Planning for Sustainable Economic Growth (PPS4) (now replaced by PPG). It is aimed at helping those involved in preparing or reviewing need, impact and sequential site assessments.
West Midlands Strategic Economic Plan 2016-2030 ⁸⁸	<p>The Strategic Economic Plan outlines three key strategic objectives for delivering economic growth across Greater Birmingham and Solihull:</p> <ul style="list-style-type: none"> • Becoming a world leader in innovation and creativity • Taking full advantage of our global connections • Creating stronger conditions for growth across our communities <p>The LEP works across these objectives, building on the scale and diversity of the assets of the GBSLEP area, to enable sustainable economic growth throughout our geography.</p>
Greater Birmingham Housing Market Area Strategic Growth Study (2018) ⁸⁹	<p>The NPPF and the Localism Act 2011 requires local authorities to work together through the 'Duty to Cooperate' across the relevant Housing Market Area (HMA) to identify and then meet housing need where it is sustainable to do so.</p> <p>The Birmingham Strategic Growth Study builds on work undertaken by Peter Brett Associates (PBA) who prepared a Strategic Housing Needs Study Stage 2 Report (November, 2014) and Strategic Housing Needs Study Stage 3 Report (August, 2015). These provide a framework and starting point for this Study, which the HMA authorities have jointly commissioned to further consider strategic development options to meet housing need across the HMA. It is intended to identify more specific options and broad locations for addressing the housing supply shortfall.</p>
Emerging Black Country Economic Development Needs	The aim of the EDNA is to provide an updated objective assessment of industrial land needs for Black Country, drawing upon an independent assessment of the area's economic development needs. The EDNA Update 2022 will provide an up-to-date assessment,

⁸⁶ Strategy for Sustainable Construction (2008) Available at: <https://webarchive.nationalarchives.gov.uk/ukgwa+/http://www.bis.gov.uk/files/file46535.pdf> [Date accessed: 26/10/22]

⁸⁷ Planning for Town Centres: Practice guidance on need, impact and the sequential approach (December 2009) Available at: <https://www.gov.uk/government/publications/planning-for-town-centres-practice-guidance-on-need-impact-and-the-sequential-approach> [Date accessed: 26/10/22]

⁸⁸ Greater Birmingham & Solihull Local Enterprise Partnership: Strategic Economic Plan 2016-2030. Available at: <https://gbslep.co.uk/strategy/strategic-economic-plan/#:~:text=The%20Strategic%20Economic%20Plan%20outlines,for%20growth%20across%20our%20communities> [Date accessed: 26/10/22]

⁸⁹ Wood (2018) Greater Birmingham HMA Strategic Growth Study. Available at: https://www.birmingham.gov.uk/downloads/download/1945/greater_birmingham_hma_strategic_growth_study [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to population and material assets
Assessment (EDNA) Update (2022)	building on the findings of the previous EDNA (2017).
Black Country Minerals Study (2019) ⁹⁰	<p>The Study provides up-to-date information about the Black Country’s mineral resources and current and future demand for minerals and mineral products, which was originally prepared as part of the evidence base to inform the former Black Country Plan. Although this is no longer being pursued, the study provides evidence base information relating to the geographic area including the Wolverhampton Local Plan.</p> <p>The Minerals Study:</p> <ul style="list-style-type: none"> • Estimates the current demand for minerals and mineral products in the Black Country; • Predicts how demand for minerals and mineral products is likely to change over the plan period and beyond ; • Reviews the capacity and vulnerability of existing mineral production sites and processing facilities in the Black Country; • Analyses where our mineral supplies are coming from at the moment and whether this is having a significant effect on other areas; and • Reviews the extent of unworked mineral resources in the Black Country and resource areas that should be safeguarded.
Black Country Waste Study (2020) ⁹¹	<p>The Study provides up-to-date information about the Black Country’s current and future waste management needs, which was originally prepared as part of the evidence base to inform the former Black Country Plan. Although this is no longer being pursued, the study provides evidence base information relating to the geographic area including the Wolverhampton Local Plan.</p> <p>The Waste Study:</p> <ul style="list-style-type: none"> • Estimates how much waste we produce in the Black Country and how it is managed; • Predicts how the amount of waste we produce might change over the plan period and beyond; • Assesses whether the Black Country’s existing waste management sites have the capacity to meet our current and future needs; • Analyses where our waste goes and whether this is having a significant effect on other areas; and • Provides advice on how we should plan for our future waste management needs.
Emerging Wolverhampton SHLAA (2022)	The Wolverhampton Strategic Housing Land Availability Assessment (SHLAA) is a comprehensive study of sites within the City which have the potential to accommodate new housing development. The Council is required to produce a SHLAA by national planning policy set out in the National Planning Policy Framework (NPPF). The SHLAA will form part of the evidence base to inform the Wolverhampton Local Development Framework and will help to ensure the timely delivery of new housing to meet Government targets.

⁹⁰ Wood (2019) Black Country Minerals Study. Available at: <https://blackcountryplan.dudley.gov.uk/media/15815/minerals-study-evidence-base-review-redacted.pdf> [Date accessed: 27/10/22]

⁹¹ Wood (2020) Black Country Waste Study. Available at: https://blackcountryplan.dudley.gov.uk/media/15811/black-country-waste-study-final-report_redacted.pdf [Date accessed: 27/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to population and material assets
Wolverhampton Waste and Recycling Strategy 2017-2027 ⁹²	<p>The strategy sets out the Council’s vision “<i>To deliver the best most environmentally appropriate and cost-effective service possible for the residents of Wolverhampton to support them to manage their waste in a sustainable way.</i>” And includes a target to increase the recycling rate to above 50% by March 2020.</p> <p>The strategy sets out the following key objectives:</p> <ul style="list-style-type: none"> • Lead, encourage and enable behaviour change of our residents through a combination of measures that increase the opportunity and motivation to not only reuse and recycle their waste but to also prevent and repair items to allow them to produce less waste. • Develop and implement a three-year waste and recycling collection service plan to deliver our waste services in a modern, quality and cost effective way to all residents of the city. • Review our household waste recycling centre provision in the city and deliver an improvement programme, accounting for: <ul style="list-style-type: none"> ○ population size, ○ accessibility, ○ how we can achieve maximum re-use from our centres, ○ how they can be funded more sustainably; • Support local businesses and other organisations both small and large within the city to understand their waste responsibilities and to reduce, reuse and recycle their waste appropriately. • Develop a future waste disposal model which builds in flexibility and ensures all future arrangements ensure the long-term stability of waste management for the residents of the city through to 2028 and beyond.

⁹² City of Wolverhampton Council Waste Strategy 2018-2028. Available at:

<https://wolverhampton.moderngov.co.uk/documents/s75571/Appendix%201%20for%20Waste%20Strategy%202018-2028.pdf> [Date accessed: 26/10/22]

A.9 Soil

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to soil
DEFRA: Safeguarding our Soils: A Strategy for England (2011) ⁹³	<p>The Soil Strategy for England outlines the government’s approach to safeguarding our soils for the long term. It provides a vision to guide future policy development across a range of areas and sets out the practical steps that are needed to take to prevent further degradation of our soils, enhance, restore and ensure their resilience, and improve understanding of the threats to soil and best practice in responding to them. Key objectives of the strategy include:</p> <ul style="list-style-type: none"> • Better protection for agricultural soils; • Protecting and enhancing stores of soil carbon; • Building the resilience of soils to a changing climate; • Preventing soil pollution; • Effective soil protection during construction and development; and • Dealing with our legacy of contaminated land.
DEFRA: Environmental Protection Act 1990: Part 2A. Contaminated Land Statutory Guidance (2012) ⁹⁴	<p>This document establishes a legal framework for dealing with contaminated land in England. This document provides guidelines for how local authorities should implement the regime, including how they should go about deciding whether land is contaminated land in the legal sense of the term.</p> <p>Key aims are as follows:</p> <ul style="list-style-type: none"> • To identify and remove unacceptable risks to human health and the environment. • To seek to ensure that contaminated land is made suitable for its current use. • To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.
National Planning Policy Framework (2021) ⁹⁵	<p>The NPPF states that plans should prevent development from contributing to, or being put at risk of, air or water pollution.</p> <p>The NPPF states that planning should protect and enhance soils, particularly those recognised as best and most versatile agricultural land (Grades 1, 2 and 3a).</p>

⁹³ DEFRA (2011) Safeguarding our Soils: A Strategy for England Available at: <https://www.gov.uk/government/publications/safeguarding-our-soils-a-strategy-for-england> [Date accessed: 26/10/22]

⁹⁴ DEFRA (2012) Environmental Protection Act 1990: Part 2A. Contaminated Land Statutory Guidance Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/223705/pb13735cont-land-guidance.pdf [Date accessed: 26/10/22]

⁹⁵ MHCLG (2021) National Planning Policy Framework Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> [Date accessed: 26/10/22]

A.10 Water

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to water
Water Framework Directive 2000/60/EC ⁹⁶	This provides an overarching strategy, including a requirement for EU Member States to ensure that they achieve 'good ecological status' by 2015. River Basin Management Plans were defined as the key means of achieving this. They contain the main issues for the water environment and the actions we all need to take to deal with them.
HM Government Strategy for Sustainable Construction (2008) ⁹⁷	Encourages the construction industry to adopt a more sustainable approach towards development; identifies eleven themes for Targeting Action, which includes conserving water resources.
DEFRA The Water Environment (Water Framework Directive) (England and Wales) Regulations (2003) ⁹⁸	<p>Requires all inland and coastal waters to reach 'good' status by 2015. It mandates that:</p> <ul style="list-style-type: none"> • Development must not cause a deterioration in status of a waterbody; and • Development must not prevent future attainment of 'good status', hence it is not acceptable to allow an impact to occur just because other impacts are causing the status of a water body to already be less than good. <p>This is being done by establishing a river basin district structure within which demanding environmental objectives are being set, including ecological targets for surface waters.</p>
Environment Agency: Building a Better Environment: Our role in development and how we can help (2013) ⁹⁹	Guidance on addressing key environmental issues through the development process (focusing mainly on the issues dealt with by the Environment Agency), including managing flood risk, surface water management, use of water resources, preventing pollution.

⁹⁶ Water Framework Directive 2000/60/EC Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060> [Date accessed: 27/10/22]

⁹⁷ HM Government Strategy for Sustainable Construction Available at: <https://webarchive.nationalarchives.gov.uk/ukgwa/+http://www.bis.gov.uk/files/file46535.pdf> [Date accessed: 27/10/22]

⁹⁸ The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003. Available at: <https://www.legislation.gov.uk/uksi/2003/3242/contents/made> [Date accessed: 27/10/22]

⁹⁹ Environment Agency (2013) Building a Better Environment: Our role in development and how we can help Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/289894/LIT_2745_c8ed3d.pdf [Date accessed: 27/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to water
A Green Future: Our 25 Year Plan to Improve the Environment (2018) ¹⁰⁰	<p>The document sets out Government action to help achieve natural world regain and retain good health. The main goals of the Plan are to achieve:</p> <ul style="list-style-type: none"> • Clean air; • Clean and plentiful water; • Thriving plants and wildlife; • A reduced risk of harm from environmental hazards such as flooding and drought; • Using resources from nature more sustainably and efficiently; and • Enhanced beauty, heritage and engagement with the natural environment. <p>The Plan seeks to achieve clean and plentiful water by:</p> <ul style="list-style-type: none"> • Reducing the damaging abstraction of water from rivers and groundwater, ensuring that by 2021 the proportion of water bodies with enough water to support environmental standards increases from 82% to 90% for surface water bodies and from 72% to 77% for groundwater bodies; • Reaching or exceeding objectives for rivers, lakes, coastal and ground waters that are specially protected, whether for biodiversity or drinking water as per our River Basin Management Plans; • Supporting OFWAT’s ambitions on leakage, minimising the amount of water lost through leakage year on year, with water companies expected to reduce leakage by at least an average of 15% by 2025; and • Minimising by 2030 the harmful bacteria in our designated bathing waters and continuing to improve the cleanliness of our waters. We will make sure that potential bathers are warned of any short-term pollution risks. <p>The 2021 Environment Act (9th November, 2021) embeds several of these aspects into the new legislation.</p>
Environment Agency: Water for people and the environment: A Strategy for England and Wales (2009) ¹⁰¹	Looks at the steps needed, in the face of climate change, to manage water resources to the 2040s and beyond, with the overall aim of improving the environment while allowing enough water for human uses.
Severn River Basin District: River Basin Management Plan	RBMPs presents the ecological, chemical and quantitative status of the surface and groundwater bodies present in the river basin. In accordance with the RBMP, new development should not lead to deterioration of the water body. Objectives, according to the Water Framework Directive, are as follows:

¹⁰⁰ DEFRA (2021) A Green Future: Our 25 Year Plan to Improve the Environment. Available at: <https://www.gov.uk/government/publications/25-year-environment-plan> [Date accessed: 27/10/22]

¹⁰¹ Environment Agency: Water for people and the environment: A Strategy for England and Wales Available at: <https://webarchive.nationalarchives.gov.uk/ukgwa/20140328091448/http://www.environment-agency.gov.uk/research/library/publications/40731.aspx> [Date accessed: 27/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to water
(2015) ¹⁰² and Humber River Basin District: River Basin Management Plan (2015) ¹⁰³	<ul style="list-style-type: none"> • To prevent deterioration of the status of surface waters and groundwater; • To achieve objectives and standards for protected areas; • To aim to achieve good status for all water bodies or, for heavily modified water bodies and artificial water bodies, good ecological potential and good surface water chemical status; • To reverse any significant and sustained upward trends in pollutant concentrations in groundwater; • The cessation of discharges, emissions and losses of priority hazardous substances into surface waters; and • Progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants.
Severn Trent Water, Water Resource Management Plan (2019) ¹⁰⁴	The Plan sets out how Severn Trent Water maintains the balance between supply and demand for water. Their priorities for the future include keeping bills for customers at a minimum, taking fair and balanced approach for all stakeholders and delivering long term environmental benefits.
Black Country Councils Water Cycle Study: Phase 1 Scoping Study (2020) ¹⁰⁵	<p>This study assesses the potential issues relating to future development within the Black Country Councils and the impacts on water supply, wastewater collection and wastewater treatment. The Water Cycle Study is required to assess the constraints and requirements that will arise from potential growth on the water infrastructure.</p> <p>This study aims to assist the Local Planning Authorities (LPAs) to identify development locations where there is minimal impact on the environment, water quality, water resources, infrastructure, and flood risk. This will be achieved by identifying areas where there may be conflict between any proposed development, the requirements of the environment and by recommending potential solutions to these conflicts.</p>
The Black Country Authorities Level 1 Strategic Flood Risk Assessment: Final Report	<p>A Level 1 Strategic Flood Risk Assessment (SFRA) has been carried out for the Black Country to inform the BCA of flood risk across the Plan area from all sources, in the present and in the future. The assessment has identified potential increases in flood risk due to climate change and produced modelled outputs.</p> <p>A Level 2 SFRA of Wolverhampton Sites (initially prepared to inform the Draft BCP) will be published in early 2023 alongside the Issues and Preferred Options report.</p>

¹⁰² Severn River basin district, river basin management plan Available at: <https://www.gov.uk/government/publications/severn-river-basin-district-river-basin-management-plan> [Date accessed: 27/10/22]

¹⁰³ Humber River basin district river basin management plan. Available at: <https://www.gov.uk/government/publications/humber-river-basin-district-river-basin-management-plan> [Date accessed: 26/10/22]

¹⁰⁴ Severn Trent Water, Water Resource Management Plan 2019 Available at: <https://www.stwater.co.uk/content/dam/stw-plc/our-plans/severn-trent-water-resource-management-plan.pdf> [Date accessed: 26/10/22]

¹⁰⁵ JBA Consulting (2020) Black Country Councils Water Cycle Study: Phase 1 Scoping Study. Available at: https://blackcountryplan.dudley.gov.uk/media/17929/watercyclestudy_phs1_scopingstudy.pdf [Date accessed: 26/10/22]

Title of PPP	Main objectives of relevant plans, policies and programmes in relation to water
(2020) ¹⁰⁶	
The Black Country Local Strategy for Flood Risk Management (2016) ¹⁰⁷	The Local Strategy for Flood Risk Management provides an overview and assessment of local flood risk in the Black Country, setting out objectives and measures for how the LLFAs will manage and reduce local flood risk. It is the document that sets out how flood risk associated with surface water, groundwater and ordinary watercourses in an area will be managed by the relevant Councils and their partners. It is a statutory duty of the local authorities within the Black Country to produce and maintain a Local Strategy for Flood Risk Management.

¹⁰⁶ JBA Consulting (2020) The Black Country Authorities Level 1 Strategic Flood Risk Assessment: Final Report, 25th June 2020. Available at: https://blackcountryplan.dudley.gov.uk/media/15818/2018s1436-black-country-councils-level-1-sfra-final-50_redacted.pdf [Date accessed: 26/10/22]

¹⁰⁷ Black Country Authorities (2016) Local Strategy for Flood Risk Management. Available at: https://www.wolverhampton.gov.uk/sites/default/files/pdf/Local_Flood_Risk_Management_Strategy_-_The_Black_Country_final_version.pdf [Date accessed: 26/10/22]

Appendix B: SA Framework

#	SA Objective	Decision making criteria: Will the option/proposal...	Indicators (this list is not exhaustive)
1	Cultural heritage: Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	a) Will it preserve features of architectural or historic interest and, where necessary, encourage their conservation and renewal? b) Will it preserve or enhance archaeological sites/remains? c) Will it preserve or enhance the setting of cultural heritage assets?	<ul style="list-style-type: none"> • Number and type of features and areas of historic designations in the WLP area. • Statutory and non-statutory sites in the Historic Environment Record (HER). • Number of historic assets on the Heritage at Risk register.
2	Landscape: Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening local distinctiveness and sense of place.	a) Safeguard and enhance the character of the landscape and local distinctiveness and identity? b) Protect and enhance visual amenity, including light and noise pollution? c) Reuse degraded landscapes/townscapes? d) Compromise the purpose of the Green Belt e.g. lead to coalescence of settlements and/or urban sprawl?	<ul style="list-style-type: none"> • National Character Area. • Tranquillity rating of area. • Re-use of derelict buildings or re-use of buildings in a prominent location. • Landscape sensitivity.
3	Biodiversity, flora, fauna and geodiversity: Protect, enhance and manage biodiversity and geodiversity.	a) Maintain and enhance features and assets of nature conservation value including biodiversity and geodiversity? b) Support positive management of local sites (SLINCs and SINCS) designated for nature conservation and geodiversity value? c) Link up areas of fragmented habitat contribute to habitat connectivity? d) Increase awareness of biodiversity assets?	<ul style="list-style-type: none"> • Number and diversity of European Protected Species, and NERC Act Section 41 species in the area. • Area and condition of priority habitats. • Area and condition of sites designated for biological and geological interest.
4	Climate change mitigation: Minimise Wolverhampton's contribution to climate change.	a) Help reduce the per capita carbon footprint of Wolverhampton? b) Encourage renewable energy generation or use of energy from renewable sources?	<ul style="list-style-type: none"> • Proximity to public transport links. • Frequency of nearby public transport services. • Distance to local services and amenities. • Energy efficiency of buildings and transport. • Percentage of energy in the area generated from renewable sources.

#	SA Objective	Decision making criteria: Will the option/proposal...	Indicators (this list is not exhaustive)
5	Climate change adaptation: Plan for the anticipated levels of climate change.	a) Avoid development in areas at high risk of flooding? b) Increase the area and connectivity of Green Infrastructure (GI)? c) Promote use of technologies and techniques to adapt to the impacts of climate change?	<ul style="list-style-type: none"> • Number of properties at risk of flooding. • Area of new greenspace created per capita. • Connectivity of GI. • Implementation of adaptive techniques, such as SUDS and passive heating/cooling.
6	Natural resources: Protect and conserve natural resources.	a) Utilise previously developed, degraded and under-used land? b) Lead to the loss of the best and most versatile agricultural land? c) Lead to the loss or sterilisation of mineral resources, or affect mineral working?	<ul style="list-style-type: none"> • Re-use of previously developed land. • Area of best and most versatile agricultural land lost to development. • Groundwater Source Protection Zone. • Proposed Mineral Safeguarding Area(s).
7	Pollution: Reduce air, soil, water and noise pollution.	a) Maintain and improve air quality? b) Maintain soil quality or help to remediate land affected by ground contamination? c) Maintain and improve water quality? d) Help to reduce noise pollution and protect sensitive receptors from existing ambient noise?	<ul style="list-style-type: none"> • Provision of GI. • Remediation of contaminated land. • Proximity to watercourses with poor quality status. • Percentage change in pollution incidents. • Development with potential to generate a significant increase in road traffic emissions or other air pollutants.
8	Waste: Reduce waste generation and disposal and achieve the sustainable management of waste.	a) Encourage recycling/re-use/composting of waste? b) Minimise and where possible eliminate generation of waste?	<ul style="list-style-type: none"> • Number and capacity of waste management facilities. • Re-use of recycled and recyclable materials. • Management of local authority collected waste.
9	Transport and accessibility: Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	a) Reduce the need to travel and/or reduce travel time? b) Provide adequate means of access by a range of sustainable transport modes (i.e. walking/cycling/public transport)?	<ul style="list-style-type: none"> • Distance to place of work. • Distance to local amenities and key services. • Distance to existing or proposed bus routes. • Frequency of bus services. • Proximity and connectivity of walking and cycling links. • Distance to train or metro station.
10	Housing: Provide affordable, environmentally sound and good quality housing for all.	a) Provide a mix of good-quality housing, including homes that are suitable for first-time buyers? b) Provide housing suitable for the growing elderly population? c) Provide decent, affordable and accessible homes?	<ul style="list-style-type: none"> • Varied housing mix. • Percentage of dwellings delivered as affordable housing. • Number of extra care homes.

#	SA Objective	Decision making criteria: Will the option/proposal...	Indicators (this list is not exhaustive)
11	Equality: Reduce poverty, crime and social deprivation and secure economic inclusion.	a) Help achieve life-long learning and increase learning participation and adult education? b) Enable communities to influence the decisions that affect their neighbourhoods and quality of life? c) Reduce crime and the fear of crime? d) Advance equality of opportunity? e) Foster good community relations? f) Eliminate unlawful discrimination, victimisation and harassment on individuals or groups in the community including consideration of age, disability, gender, race, religion, gender re-assignment, maternity, sexual orientation, marriage and civil partnership, and human rights?	<ul style="list-style-type: none"> No. of people with NVQ2 qualifications. Percentage of adults surveyed who feel they can influence decisions affecting their own local area. % respondents very or fairly satisfied with their neighbourhood. Crime Deprivation Index. Education, Skills & Training Deprivation Index. Availability of libraries. Index of Multiple Deprivation
12	Health: Safeguard and improve community health, safety and wellbeing.	a) Improve access for all to health, leisure and recreational facilities? b) Improve and enhance Wolverhampton's GI network? c) Improve road safety? d) Reduce obesity? e) Consider the needs of Wolverhampton's growing elderly population?	<ul style="list-style-type: none"> Travel time by public transport to nearest health centre and sports facilities. Provision and accessibility of open greenspace and GI. Accessibility to sports facilities e.g. football pitches, playing fields, tennis courts and leisure centres.
13	Economy: Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.	a) Increase accessibility of suitable employment within Wolverhampton? b) Encourage business start-ups in the area? c) Support the health of established centres? d) Protect and create jobs?	<ul style="list-style-type: none"> Number of residents working within Wolverhampton. Number of employment opportunities in professional occupations. Number of new business start-ups as a result of the development. Total amount of employment land. Number of vacant units in strategic centres. Amount of additional retail, office and leisure floorspace completed in established centres.

#	SA Objective	Decision making criteria: Will the option/proposal...	Indicators (this list is not exhaustive)
14	<p>Education, skills and training: Raise educational attainment and develop and maintain a skilled workforce to support long-term competitiveness.</p>	<p>a) Improve access for all to education and training opportunities? b) Encourage a diversity of education and training opportunities?</p>	<ul style="list-style-type: none"> • Distance to education and training, particularly primary schools and secondary schools. • Provision of new education and training facilities and opportunities. • Accessibility of education and training facilities by public transport. • Capacity of local schools to meet demand from new development.

Habitats Regulations Assessments

Sustainability Appraisals

Strategic Environmental Assessments

Landscape Character Assessments

Landscape and Visual Impact Assessments

Green Belt Reviews

Expert Witness

Ecological Impact Assessments

Habitat and Ecology Surveys



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