



WARRINGTON GARDEN SUBURB

Development Framework

March 2019



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Warrington Garden Suburb Development Framework

CONTENTS

- 01** Introduction
 - 02** Understanding the Place: Planning Context
 - 03** Understanding the Place: Local Context
 - 04** Options & Engagement (including landowner engagement)
 - 05** Garden Suburb Development Framework
 - 06** Proposed Infrastructure
 - 07** Design Principles and Placemaking
 - 08** Conclusion and Next Steps
-



Introduction

01

Purpose of this Document

This Development Framework document has been prepared as a record of evidence base, engagement process and design studies that underpins future development proposals for Warrington Garden Suburb (WGS). It consequently informs the preparation of the emerging Local Plan that is presently being developed by Warrington Borough Council (WBC).

This document sets out a policy review, spatial analysis and an analysis of relevant transport, planning, environmental and utilities considerations to provide the background for developing and testing a comprehensive WGS Framework Plan.

WGS, forms part of the wider south Warrington area, and is defined by its proximity to large scale transport infrastructure (i.e. M6 and M56) and physical boundaries such as the Bridgewater Canal. It hosts a number of scattered residential communities and employment, areas; however the bulk of it is agricultural land within the Green Belt.

WGS is located approximately 5 km south east of Warrington Town Centre (see fig. 1.1 and fig. 1.2). It covers an area of over 1,500 hectares. Appleton and Dudlow's Green are located immediately to the west, which link via London Road (A49) to the Town Centre. To the south and east the site is bordered by the M56 and M6 which provide wider strategic connections via Junction 9, 10 and 20 respectively. The settlement of Grappenhall lies to the north and together with A56 and the Bridgewater Canal defines the northern boundary of WGS.

Report Content

This Framework Report is divided into eight individual sections as follows:

One: provides a general introduction as well as a brief summary of the wider site context and location.

Two: places WGS in context of national and local planning policy. It also provides a summary of the sites submitted by developers for consideration in the emerging Local Plan and Green belt assessment.

Three: provides baseline site analysis including landscape character, topography, environmental designations, heritage, vehicular and non-vehicular movement, utilities and social infrastructure.

Four: summarises stakeholder engagement exercises that informed development of a preferred option.

Five: this preferred framework is described in more detail in section five incorporating a description of the proposed three village structure; the location of the employment land and neighbourhood centre; a green/blue networks; vehicular and non-vehicular structures; and proposed social infrastructure.

Six: proposed infrastructure and the potential to integrate roads, utilities, public transport and green corridors is covered in section six.

Seven: provides further material and place making proposals to illustrate the quality of environment envisaged in individual villages and character areas together with density and phasing plan and schedules.

Eight: an overall conclusion and summary of next steps is provided in section eight.

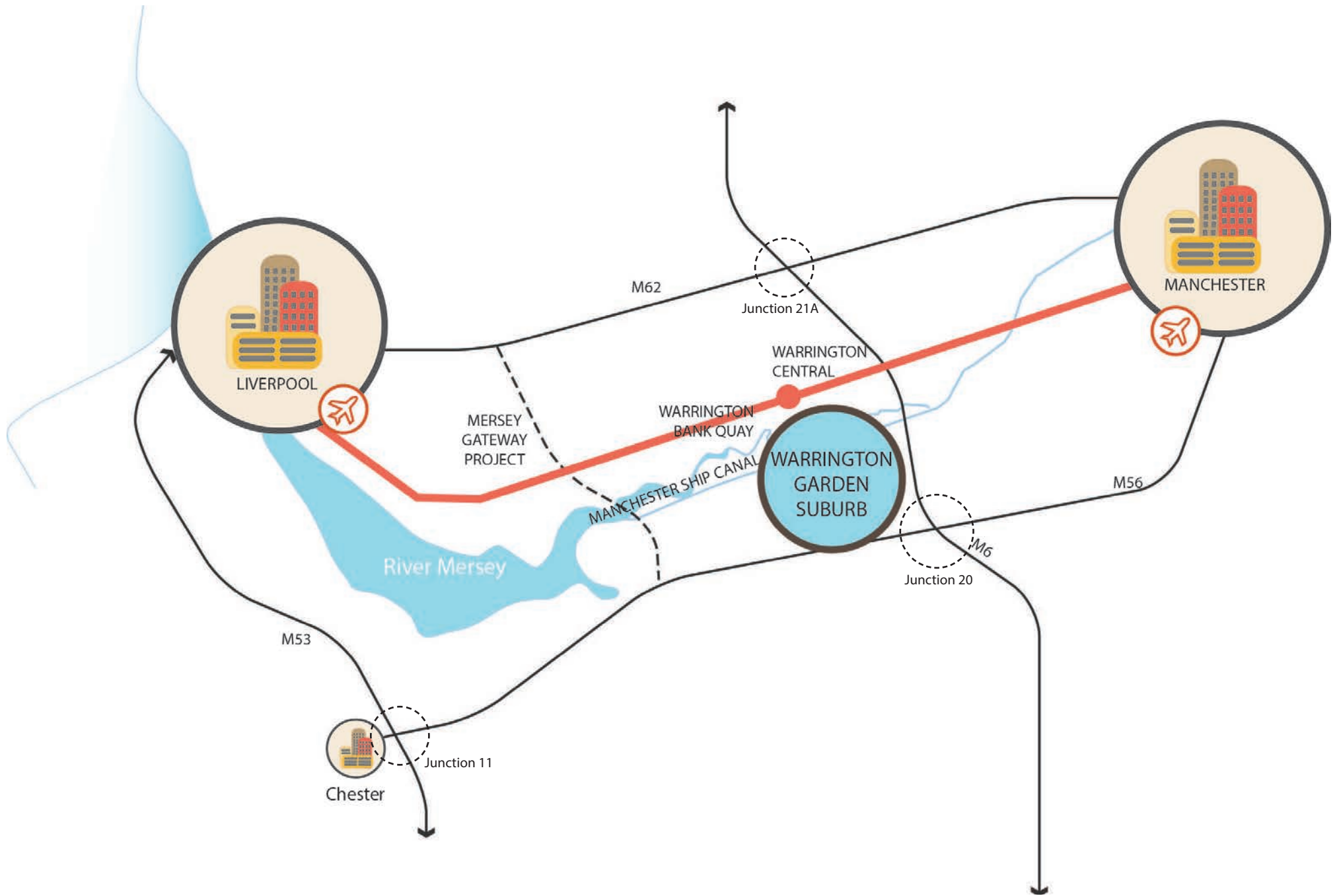


Fig 1: Warrington Garden Suburb in the regional context

The Vision

The overarching aims and primary objectives set out in the original WGS brief are to create a framework which defines the scale and type of development that is likely to come forward within this area, the social and physical and transport infrastructure required to support it and to provide a vehicle for consensus building and implementation.

The framework will be used to define an implementation timetable and delivery routes. It should support and fully integrate with the review of the Local Plan, demonstrating the deliverability of WGS. It will generate a flexible structure that enables private sector partners to bring forward their individual development proposals in a co-ordinated manner, providing a mechanism to ensure all landowners and developers make a proportionate contribution to the strategic infrastructure required to deliver the full development potential of the site. Individual components of the framework are listed below:

- Create a framework which defines the scale and type of development that is likely to come forward within the this WSG area;
- Defines the social and physical and transport infrastructure required to support it;
- Provide a vehicle for consensus building and implementation;
- Support and integrate with the review of the Local Plan;
- Demonstrate deliverability of the scheme; and
- Understand existing character and minimise impact.

At a more detailed level the ambitions for WGS will include:

- Delivery of a major new urban extension of between 5,000 and 7,500 new homes set out in three garden neighbourhoods surrounding a new neighbourhood centre with retail, health and leisure facilities and a new Country Park.
- Walking, cycling and public transport linkages will connect these neighbourhoods to local and neighbourhood centres, such as Stockton Heath, a new employment area and to Warrington Town Centre.
- An extensive and attractive green network will bind the WGS development area together with links to the wider Warrington off-road network.
- A mix of housing will be provided, incorporating the potential for different densities and a range of typologies that maximise flexibility. All residential areas should be fully permeable to facilitate easy cycle and pedestrian access and all new distributor roads should include high standard cycling and pedestrian provision, through shared use or segregated facilities as appropriate. In addition, the WGS will benefit from a new secondary school, up to four new primary schools, and a major new Country Park. All such facilities should be well located to incentivise safe, sustainable travel and include on-site facilities for secure cycle storage.
- A major new employment area is also envisaged as an extension of the successful Appleton Thorn / Barleycastle business sites at the strategically important intersection of the M6 and M56. This will provide some 10,000 jobs within easy walking and

cycling distance of the new residential neighbourhoods. Given the major opportunity to create a sustainable pattern of work trips to this new employment area, it is essential that the housing mix includes a significant proportion of higher density or affordable housing, more typical of employees in warehouse/distribution employment uses.

- The ambitions for the WGS are aligned to the overall vision for Warrington as a whole, as set out in the Preferred Development Option (PDO) and refined in the Proposed Submission Version Local Plan.

The framework process will also act as an engagement tool allowing all major landowners and developers with land interests in the WGS area work together to deliver development in a co-ordinated manner over the Local Plan period and beyond, and the masterplanning work which is the subject of this brief will be key to realising this.

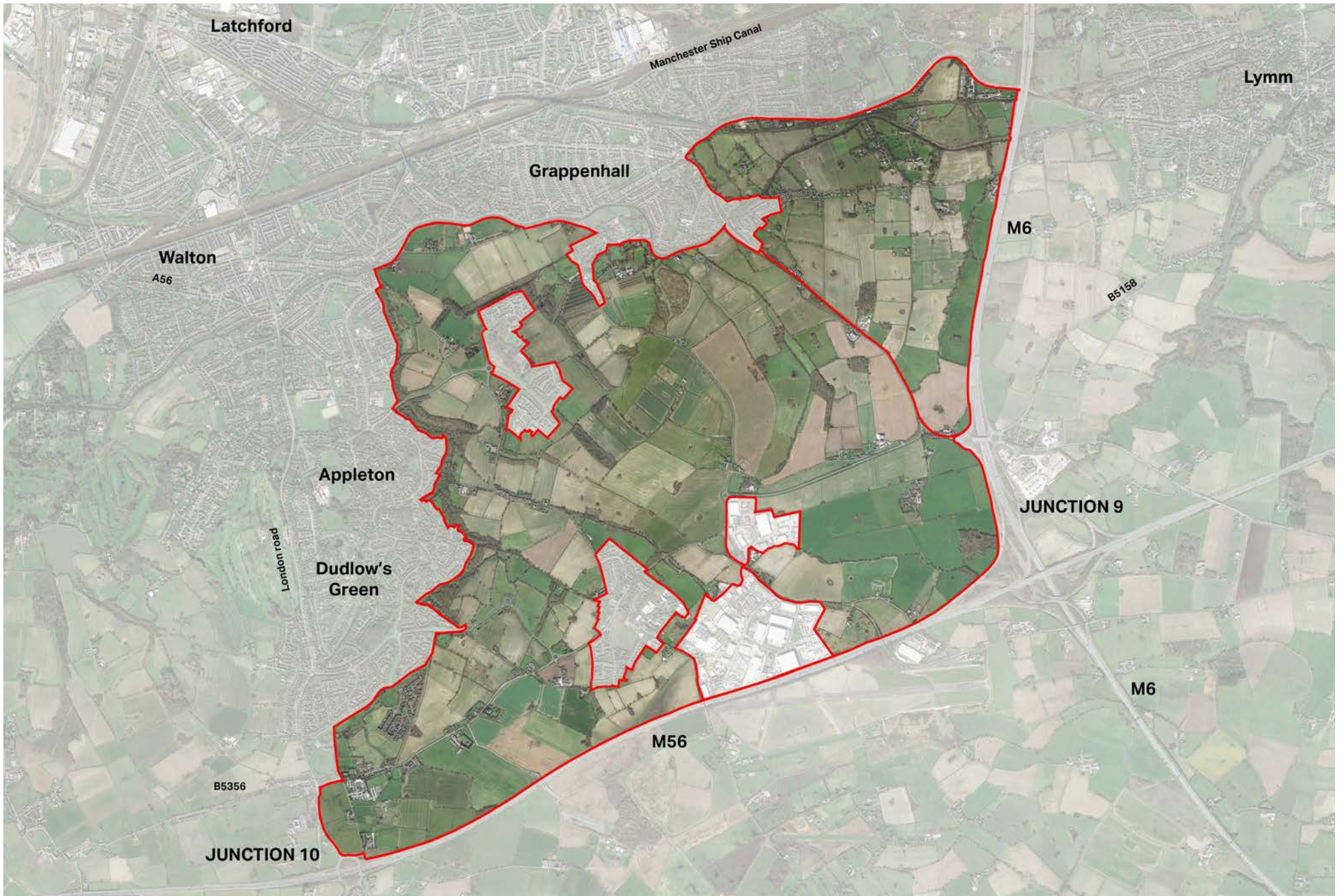


Fig 1.2: Warrington Garden Suburb boundaries



**Understanding the Place:
Planning Context
Wider Context**

02

Planning Policy

The following section examines the implications of planning policy on WGS; comprising the national and local planning policy, adopted and emerging.

National Planning Policy

National Planning Policy Framework NPPF (March 2018)

This is the first revision of the National Planning Policy Framework since 2012. The revised National Planning Policy Framework will be a vital tool in ensuring that we get planning for the right homes built in the right places of the right quality at the same time as protecting our environment. All the relevant chapter are listed below:

- Achieving sustainable development;
- Delivering a sufficient supply of homes;
- Building a strong competitive economy;
- Promoting healthy and safe communities;
- Promoting sustainable transport;
- Making effective use of land;
- Achieving well-designed places;
- Meeting the challenge of climate change, flooding and coastal change;
- Conserving and enhancing the natural environment;
- Conserving and enhancing the historic environment;

Planning Practice Guidance, (2014)

The National Planning Practice Guidance was published in

2014 and includes a section on design and guidance for promoting landscape character. It states that “development should seek to promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development” and that the “successful integration of new developments with their surrounding context is an important design objective”.

The Raynsford Review of Planning (November 2018)

The Raynsford Review of Planning has been set up to identify how the government can reform the English planning system to make it fairer, better resourced and capable of producing quality outcomes, while still encouraging the production of new homes. The objective is a simpler, fairer system which works for all sectors and in the public interest, with strong democratic accountability and in-built incentives to deliver greater certainty and consistency. WGS framework has been carried out in line with the principles and process set out within this review.

Local Planning Policy

Local Plan Core Strategy, (2014)

At a local level, the Warrington Local Plan, adopted in 2014, sets out the framework to guide decisions in the Borough over the next 15 years, including a wide range of activities that shape areas, from the role of the town in the economy, the health of the Town Centre, and how future housing needs can be accommodated, to the location of new schools and opportunities for outdoor play for children.

The Warrington Core Strategy is the central policy document in Warrington’s Local Planning Framework; it was adopted by the Council on 21 July 2014 and incorporates the Local Plan Core Strategy which sets out the overarching spatial strategy for the Borough, including the strategic vision for Warrington as to how it will look and function in 2027.

The Borough Wide Strategy element of the document sets out a number of detailed policies which follow from the core policies. The Place Making section of the document sets out a number of detailed and place specific policies for six different areas of the Borough including South Warrington. The Development Management section of the document does not set out actual policies instead it is intended to assist potential developers and applicants. The monitoring section of the document sets out who the key delivery partners are with regards to achieving the objectives and hence visions expressed within each sub section of the document.

Policies of relevance to WGS are listed below:

- Policy CS 1, Overall Spatial Strategy - Delivering Sustainable Development.
- Policy CS 2, Overall Spatial Strategy – Quantity and Distribution of Development.
- Policy CS 4, Overall Spatial Strategy – Transport.
- Policy PV 1, Development in Existing Employment Areas.
- Policy SN 1, Distribution and Nature of New Housing.

- Policy SN 2, Securing Mixed and Inclusive Neighbourhoods.
- Policy SN 6, Sustaining the Local Economy and Services.
- Policy QE 3, Green Infrastructure.
- Policy QE 4, Flood Risk.
- Policy QE 5, Biodiversity and Geodiversity.
- Policy QE 6, Environment and Amenity Protection.
- Policy QE 7, Ensuring a High Quality Place.
- Policy QE 8 Historic Environment.
- Policy MP 1, General Transport Principles.
- Policy MP 3, Active Travel.
- Policy MP 4, Public Transport.
- Policy MP 5 Freight Transport.
- Policy MP 6 Transport Infrastructure.
- Policy MP 10 Infrastructure.

Local Plan Review, Preferred Development Option Regulation 18 Consultation, (2017)

In October 2016, the council launched its Local Plan Review to drive forward the growth and development of the Borough over the next 20 years; it included a 'Call for Sites' exercise to support the Borough's development needs. Following the initial consultation on the scope and contents of the Local Plan review, the Council has now prepared its Preferred Development Option which sets out the proposed approach to meeting Warrington's need for

new homes and jobs between now and 2037. It also identifies the infrastructure required to ensure that Warrington's growth is sustainable.

The Preferred Development Option provides an ambitious plan for the future growth of Warrington. It aims to significantly boost development in the Town Centre and across Inner Warrington, complemented by the release of Green Belt land and supported by wide ranging infrastructure investment.

Paragraph 5.28 highlights the vision for the south eastern extension of Warrington. It states this area will create a new Garden Suburb, providing the potential development of around 7,000 new homes to be delivered over the full 20 years of the Plan. This includes land for 950 homes which is outside of the Green Belt. The suburb will also provide a major new employment area as an extension of the existing Appleton Thorn / Barleycastle estates at the intersection of the M6 and M56.

Other Relevant Planning Considerations

Neighbourhood Plan for Appleton Thorn

Appleton Parish Council prepared a Neighbourhood Plan for Appleton Thorn, providing more detailed development principles for this area. The Plan has successfully passed examination and a local referendum and is was adopted by the council in summer 2017. The Neighbourhood Plan seeks to achieve the following objectives:

- Housing: Ensure that new housing in the designated area is provided in developments that are in keeping with the size scale and function of the Ward and that housing choices are available for all sectors of the community.
- Design, Natural and Built Environment: Ensure that all new development is of high quality and sustainable and reflects the character and heritage of the designated area. To protect and enhance the heritage assets of the designated area. To protect and enhance the landscape and setting of the designated area.
- Traffic and Highways: To ensure that all traffic and transport issues are addressed especially with respect to safety, speed and congestion. To promote safe walking and cycle routes both within the designated area and to nearby towns and villages.
- Employment: To support services and other businesses providing employment opportunities.
- Community Facilities and Infrastructure: To protect and enhance community facilities within the designated area. To protect and enhance the quality of open spaces.

Design and Construction SPD, 2016

This Supplementary Policy Document was adopted in 2010 and then amended in 2016. It seeks to provide guidance on urban design, sustainable design and construction, design in the historic environment, shop front design, rural and landscape design, public realm, culture and public art, transport design, waste and address design and crime.

Environmental Protection SPD, 2013

This Supplementary Planning Document sets out in detail, the Council's approach to dealing with Environmental Protection including; Contaminated Land Air Quality Light Pollution Noise and Vibration and identifies associated impacts that could affect public health and wellbeing.

Parking Standards SPD, 2015

The specific aims of this policy document are to ensure that parking provision for new development:

- is sufficient to avoid on-street parking congestion, highway safety and visibility problems;
- avoids over-provision that would result in the inefficient use of land;
- encourages high quality design;
- meets the needs of all users; and
- maintains the principles of sustainable development.

Open space and recreation provision

The Open Space Audit 2015 records the position of open space at that time and served as an update to the Open Space Audit 2012. The surveys were undertaken in June 2015 and it establishes quantitative, qualitative and accessibility standards for each of the adopted open space typologies and explains the assessment methodology behind the application of the standards.

Strategic Housing Land Availability Assessment, July 2017

The SHLAA is a key part of the evidence base for the current Local Plan Review. It forms part of the urban capacity assessment that has been undertaken to provide a robust understanding of the Borough's housing capacity, along with the master planning work for the town centre

from now until 2032. Deliverable and developable housing land supply over the next 15 years is in total 9,721 dwellings.

Mid Mersey Strategic Housing Market Assessment (SHMA) Update - Warrington Addendum 2017

This report provides analysis of issues related to the Objectively Assessed Need (OAN) for housing over the period 2015 - 2037 across the Mid Mersey HMA, local authorities, including Warrington. The analysis is aligned with evidence contained within the Liverpool City Region SHELMA. The report shows that the population of Warrington is projected to increase by approximately 12%. The report includes evidence of an increase in household formation, demographic-based and economic housing need as well as Market signals and affordable housing need.

Settlement Profiles - Main Urban Area, July 2017 & Settlement Profiles - Outlying Settlements, July 2017

This report incorporates area profiles for the different parts of the main urban areas of Warrington (central, north, south, east and west) and for each of the outlying settlements. These profiles provide a detailed assessment of the capacity of local schools, health facilities, open space, leisure facilities, community facilities and the transport network.

Urban Capacity Statement Update 2017

The urban capacity figure is a product of the updated SHLAA (2017) figure, EDNA (2016) and updated Master Planning work undertaken in partnership with Warrington & Co. It has confirmed a capacity for 15,429 new homes over the next 20 years and an urban capacity for 129.77ha of employment over the next 20 years.

Site Assessment Proformas - South Warrington 2017

An initial assessment of the sites submitted by developers in South Warrington prepared by Warrington Borough Council.

Green Belt Assessment - Addendum following Regulation 18 Consultation 2017, Green Belt Assessment - Additional Site Assessments 2017, Green Belt Assessment - Original Report October 2016, Green Belt Assessment - Original Report October 2016 - Appendix F

An assessment the Green Belt and of each site submitted by developers in terms of how important the site is for Warrington's green belt (see figure 2.xx Green Belt Assessment). It includes a response to comments made to the Green Belt Assessment Report prepared for the Council's initial consultation in 2017. Additional information is provided in section "Green Belt Assessment".

Garden City Suburb - Development Concept 2017

The framework plan provided in this document demonstrates potential solutions to achieving the ambition and vision, which will include 7,979 housing units, 117.3 ha of employment land, one secondary school, up to 3 primary schools, a new 84.1 ha Country Park, and 55 ha Neighbourhood Core.

Review of Warrington Employment Targets to 2040, 2017

This report has been to review whether the employment target for Warrington in the Cheshire and Warrington LEP SEP is reasonable given historic growth and the current investment pipeline. The document concludes that the current target of 31,000 additional jobs to be created to 2040 is a reasonable target.

Economic Review

The UK economy has lost some momentum as consumer spending has been hit by rising inflation coupled with economic and market uncertainty around Brexit negotiations, which continues to curb decision making and investment. Despite this, modest economic growth is set to continue in the UK as the global economy remains strong and the competitive value of the pound attracts overseas investment, which is spreading beyond London to the regions.

The economic outlook has impacted upon each sector in different ways, with retail witnessing the greatest challenges, particularly in secondary locations, whilst industrial and logistics have bucked the trend of declining investment.

Regardless, the Warrington South East Extension is a medium to long term project that will continue to be implemented beyond the current economic cycle and future predictions. As such, it must appeal to the fundamentals of market demand, providing an attractive place to live in an accessible location, supported by appropriate social infrastructure and employment opportunities.

Local Market Review

Residential

Warrington Garden Suburb sits within one of the highest residential value areas of the North West making it an attractive location for house builders, buyers and occupiers. However, given the scale of the extension area, there will continue to be variations in local values and target market. Analysis indicates local values ranging from £240 per sq ft in Grappenhall Heys to £300 per sq ft in South Grappenhall and £330 per sq ft in West Lymm. A relatively high representation of owner-occupation and detached and semi-detached properties, which tend to be

larger, supports the profile of an affluent local market.

The residential market review demonstrates strong demand for executive housing in an attractive commuter belt. However, when considering in the order of 5,000 new homes, scope exists to provide greater choice to occupiers in terms of both tenure and type including low-mid rise apartments and specialist housing for example for older people in sustainable locations such as the proposed neighbourhood centre; smaller units for those unable to afford or need a larger home; and alternative tenures such as private rental, low cost home ownership and social housing. A broader mix of housing offer should also support faster build out rates, support effective phasing and prevent undermining of wider growth aspirations in other areas such as Warrington Town Centre.

Employment

Occupier demand for high quality logistics space around key motorway junctions and with accessibility to major urban areas remains robust and is driven by the fast paced growth of the e-commerce sector as retailers continue to expand and optimise their on-line sales distribution channels. A weak sterling is also bolstering exports for manufacturing, but with occupier requirements increasingly focused on advanced high value R&D and production facilities as the need to drive efficiencies and remain competitive in an increasingly globalised market intensifies. As a result, Grade A supply has become increasingly constrained putting upward pressure on rental levels but speculative development has slowed due to perception of risk and economic uncertainty.

Warrington Garden Suburb has significant appeal as an employment location benefiting from strategic accessibility to the UK's main motorway infrastructure (M6), the West Coast Mainline, Manchester Ship Canal and Manchester and Liverpool Airports. Warrington also has a

strong economic base in terms of employment, skills and an attractive place to live, supported by new residential. The constrained supply of good quality industrial space and strong occupier demand is evidenced by the success of Omega, which is now at capacity. This location can provide the next injection of floorspace, supporting future economic growth and job creation.

Local Centres

The considerable scale of new housing and employment development proposed at Warrington Garden Suburb will require, through both planning obligations and market demand, a range of social-infrastructure facilities to serve the new community. This will include schools, health care and convenience retail within a new neighbourhood centre. Comparison retail and larger scale leisure uses should be discouraged so as not to create a conflict with surrounding residential or pull trade away from Warrington Town Centre and nearby Stockton Heath.

The convenience food retail sector has faced some challenges over recent years as consumer shopping habits have shifted towards 'little and often' spending; increased eating out; greater awareness of food provenance and quality; and demand for decreased shopping times. As a result, the larger supermarkets have lost market share to the discounters and have responded by increased presence of smaller 'convenience' outlets. Such an outlet would fit well at Warrington Garden Suburb, enjoying the profile and footfall of the new population, serving local needs and acting as an anchor tenant for other local uses within the Neighbourhood Centre.

Social Infrastructure

Existing social infrastructure surrounding WGS is in general located to the north and west of the site. The majority of these uses quite naturally concentrate around areas of existing settlement and are consequently not within convenient walking distance of WGS; especially along the western and southern boundaries. Existing social infrastructure essentially falls into three categories (refer to Figure 2.1, opposite):

- Educational facilities: the majority of the existing education facilities are located to the north/west of WGS. There are four secondary schools - Bridgewater High School Lower, Bridgewater High School Upper, Sir Thomas Boteler C of E High School and Cardinal Newman Catholic High School. Chaigeley School, a special school for pupils with behavioural, emotional and social difficulties, is located to the north of WGS and Appleton College to the north-west.
- Healthcare facilities: healthcare facilities are again clustered to the north and west of the site they include: Bupa Health Centre Warrington, to the west of WGS - Warrington and Halton Hospitals NHS Foundation Trust, approximately 2km to the north-west, together with a range of more local smaller scale health centre, pharmacies and dentists;
- Community facilities: There are a number of community facilities surrounding the WGS area. St. Werburgh's Community Hub, Sandy Lane Community Centre and Broomfields Leisure Centre to the west of WGS, with Quays Community Centre and Grappenhall Youth Community Association to the north. There are also two local centres and Warrington Town Centre which is 5 km away to the north-west.

The distribution and scale of existing social infrastructure lead to the obvious conclusion that WGS will need to incorporate further provision as part of the framework; of sufficient scale and in locations that meet new community needs to access facilities through sustainable forms of transport.

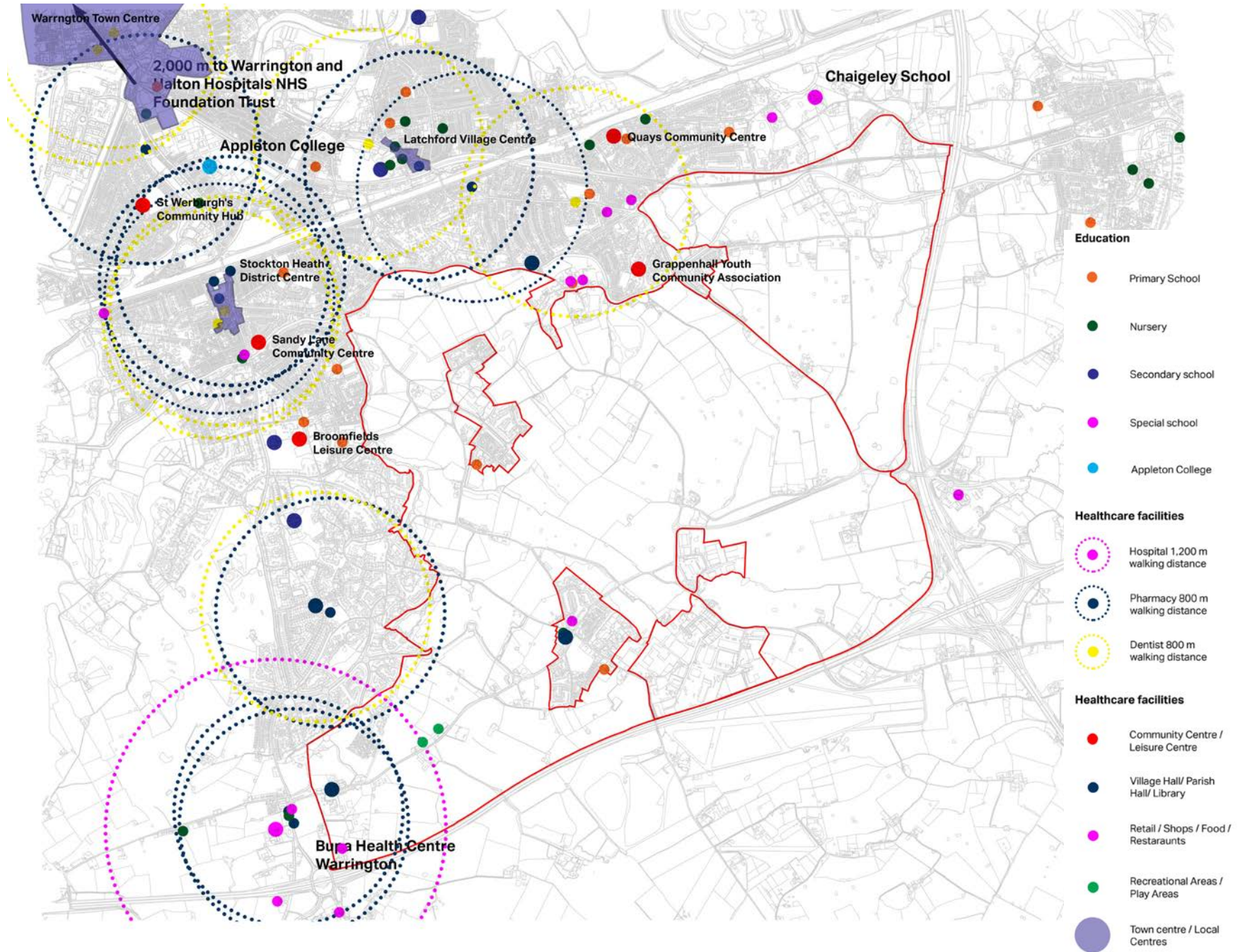


Fig 2.1: Social Infrastructure

Call for Sites

WBC received over 45 'call for sites' submissions in the WGS area, from both public and private sector landowners and developers. The sites for and considered as part of the development framework evolution were compiled from the initial submissions used for the production of the 2017 framework (Phase 1) and additional later submissions referred as "Phase 2". A number of sites from Green Belt Site Selection and SHLAA Green Belt Site Proformas were also considered.

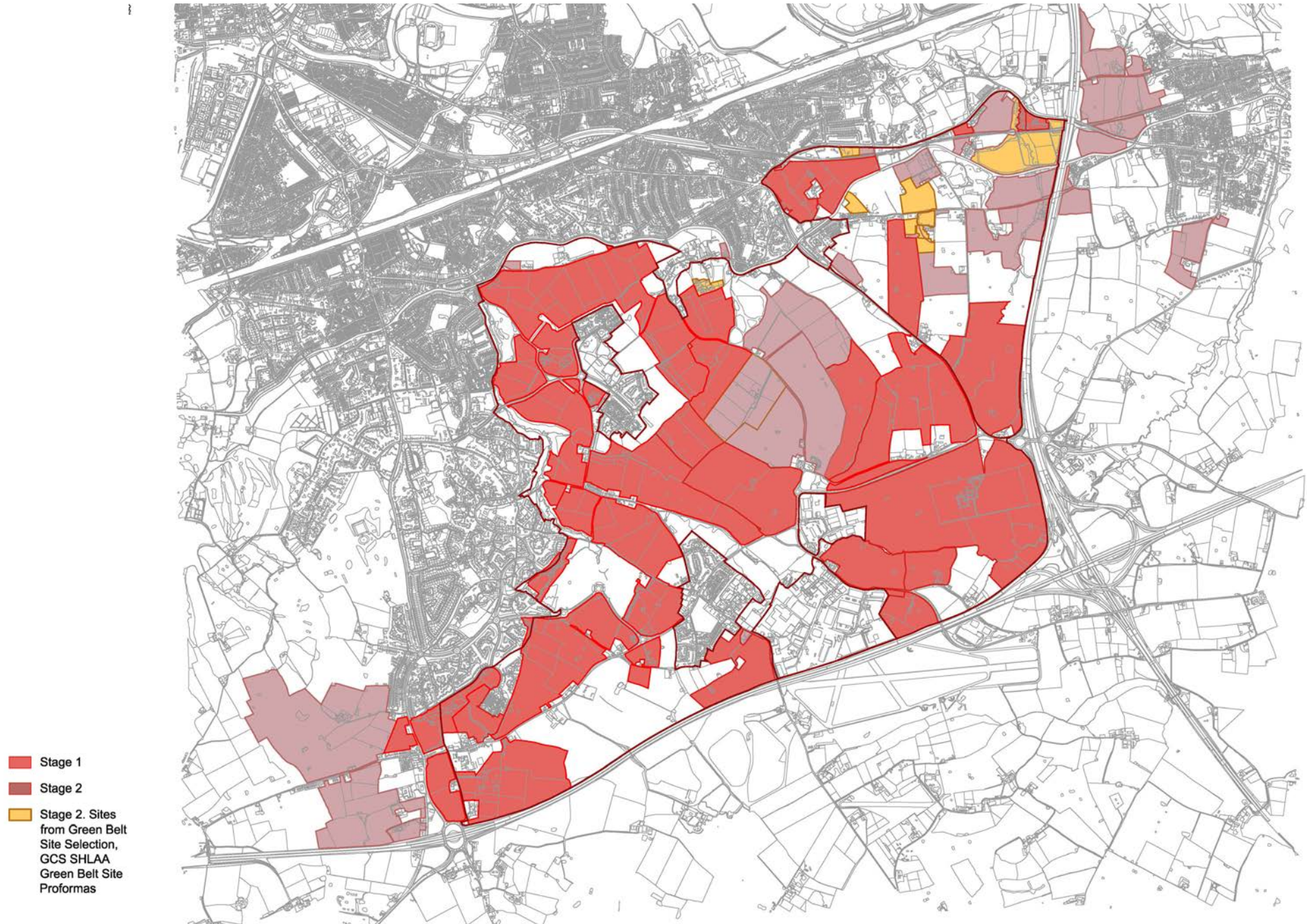


Fig 2.2: Call for Sites

Green Belt Assessment

As a part of the original Local Plan PDO evidence base, a Green Belt Assessment was undertaken by ARUP on behalf of WBC in 2016. It provided WBC with an objective, evidence-based and independent assessment of how Warrington's Green Belt contributes to the five purposes of Green Belt set out in national policy.

Following this assessment, each site from 'Call for Sites' exercise was examined in terms of its contribution to the Warrington's Green Belt. It can be seen from Figure 2.3 opposite that the majority of sites play moderate or low contribution to Green Belt.

This determined the design and delivery strategy of WGS:

- Parcels making weak contribution: considered to be delivered in the early staged of the development;
- Parcels making moderate contribution: proposed to be delivered in a variety of phases;
- Parcels have a strong contribution: those in north-eastern part of WGS will be kept untouched as original Green Belt within the planning period. A parcel in south-wester part of WGS shall be used as an open countryside. Due to its position within a close proximity to the existing employment land and good connectivity, the benefits of the development of the parcel in the south-western part of WGS are considered to be sufficient to propose it as employment land.

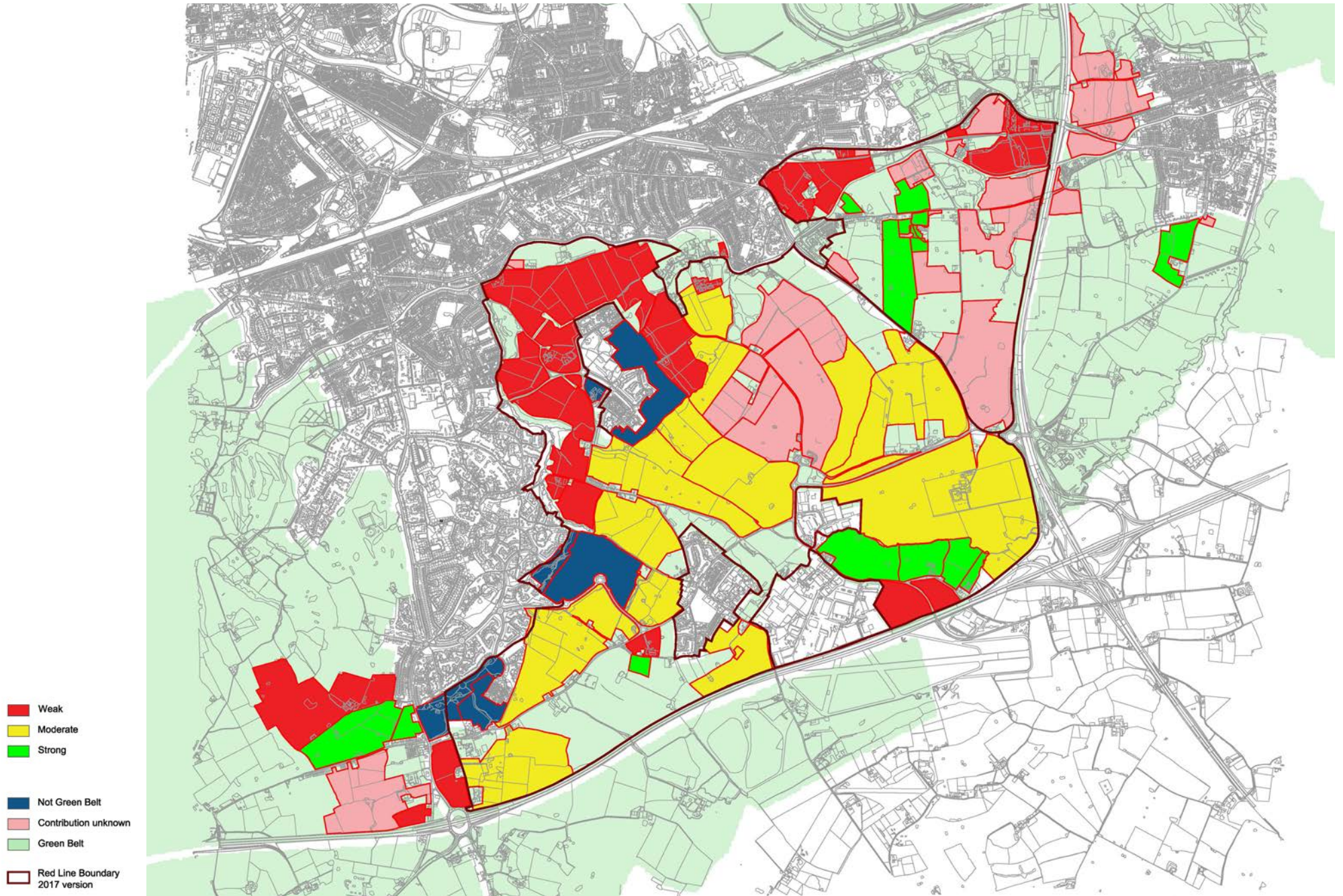


Fig 2.3: Green Belt Assessment



Understanding the Place: Local Context

03

Local Context

The physical characteristics of WGS are considered in this section of the report. Landscape character, heritage assets, key landmarks and views that inform local identity and consequently impact on the spatial form are analysed. Further desktop reviews of high level technical constraints and associated opportunities are also explored.

Landscape Character

A desk-top review of the WGS landscape character and associated site survey were undertaken to inform analysis of the potential landscape impact of development and consequent mitigation principles to be factored into the masterplanning process. The appraisal is based upon principles set out within 'Guidelines for Landscape and Visual Impact Assessment' GLVIA (Landscape Institute and Institute of Environmental Management and Assessment, 3rd Edition, 2013).

National Landscape Character Context:

Natural England classifies WGS as falling within National Landscape Character Area NCA 60, Mersey Valley. Its pertinent key characteristics are identified as comprising:

Trees and woodland are mainly associated with settlements, occasional parkland and isolated woodland blocks; and in recent years new community woodlands have been planted;

The field pattern is regular and large scale, often defined by hedgerows with isolated hedgerow trees; many hedgerows are intermittent and have been replaced by post-and-wire fencing, while field boundaries on the moorlands are marked by ditches; and

The predominant building material is red brick though some sandstone construction remains, and some survival of earlier timber frame in certain locations.

Local Landscape Character Context:

At local level, the 'Warrington: A Landscape Character Assessment' report, prepared by Agathoclis Beckmann Landscape Architects for Warrington Council in 2007 identifies 6 types of Landscape Area. Each landscape area is divided into further sub-divisions of

Landscape Areas (see Figure 3.1). The site covers six sub-divisions of Landscape Areas as listed below:

- Area 1A – Stretton & Hatton
- Area 1B - Appleton Thorn
- Area 2C - Stretton & Appleton Moss
- Area 3A - Appleton Park & Grappenhall
- Area 3B - Massey Brook
- Area 4C - Former Stretton Airfield

A more detailed visual study of each character is provided in the following pages.

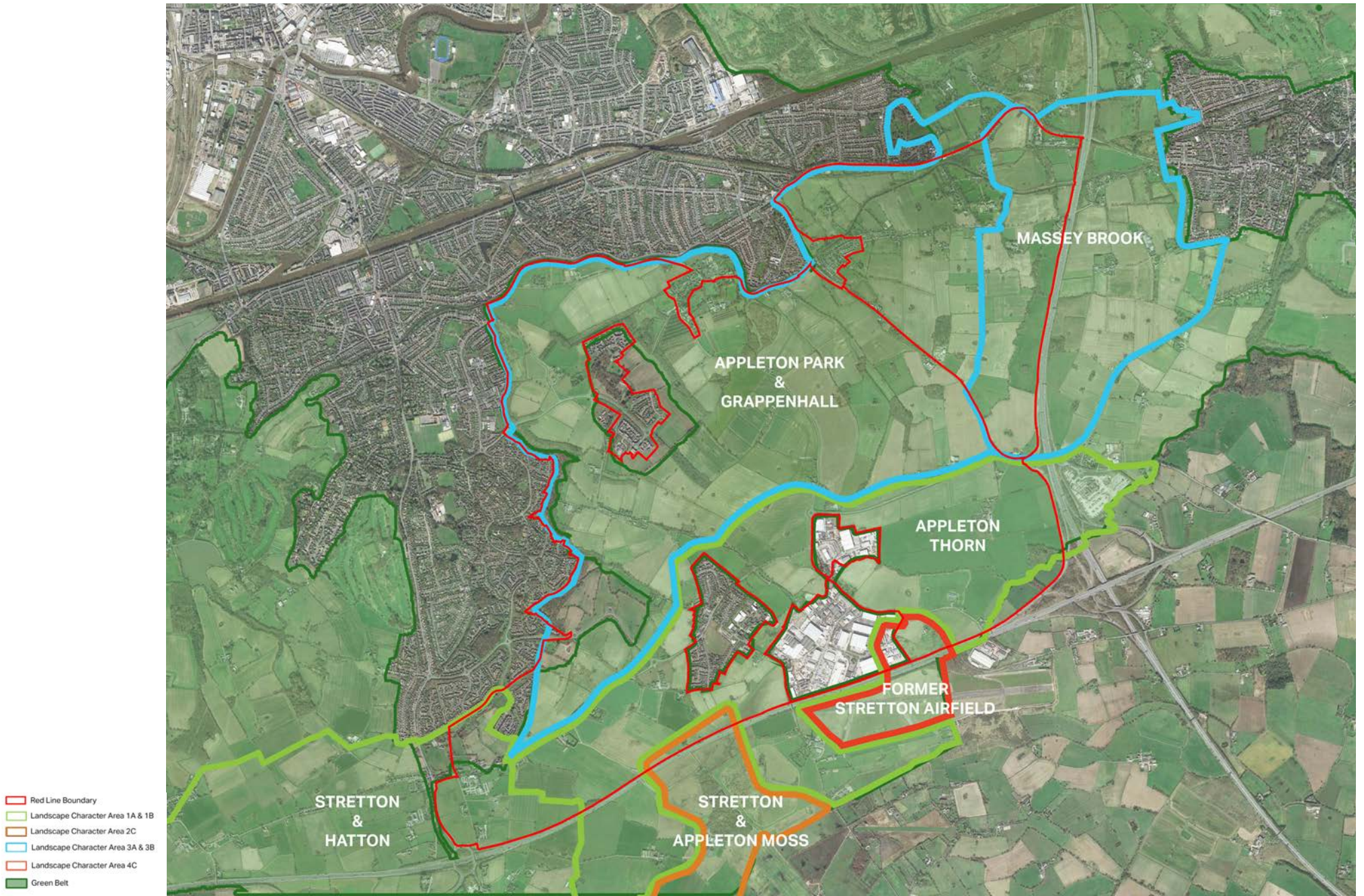


Fig 3.1: Landscape Character Areas

Area 1A – Stretton & Hatton

The Hatton area comprises a broad, gently undulating agricultural landscape situated to the south-west of the WGS. The highest point is in the north in the form of a Red Sandstone Escarpment that gently falls away the south. The area is strongly influenced by the M56 motorway which runs through the east/west just to the south of the escarpment.

Hatton Lane, just north of the M56, is built on the line of a Roman Road. The farmland is a traditional mix of pasture and arable although more recent changes include noticeable areas of horse grazing, fishing ponds and a farm shop development. The primary characteristics are listed below:

- Gently undulating landscape containing small to medium-sized regular fields. Mixed farming with variable' hedgerow definition;
- The area is well linked with the surrounding villages and incorporates a settlement pattern comprising scattered farms and hamlets retaining much of their original character;
- A mixture of modern and traditional lower density two story detached and semi-detached dwellings interspersed with local amenities; and
- Building material pallets are predominantly redbrick or render with slate roofs.

Typical architectural character of Stretton & Hatton is illustrated in the photographs opposite.



Area 1B – Appleton Thorn

Farmland is generally undulating, falling to reasonably level areas of mosslands known as Appleton and Stretton Moss. Agriculture is mainly arable and is characteristically composed of very large fields interspersed with a small number of hedgerows. Settlement is mainly represented by the attractive village centre of Appleton Thorn, highlighted by its church tower set on the ridgeline and by the 'village extension' of Appleton Thorn Trading Estate. Farm complexes tend to be larger than those found in surrounding areas, possibly reflecting the improved agricultural production related to the mosslands. The primary characteristics are listed below:

- Broad expansive agricultural landscape lacking hedgerows;
- The built environment reflects sub-urban/countryside character, comprising medium density residential development, agricultural premises and large employment/industrial estates; and
- A mixture of buildings - modern housing estates to the north; the southern area (built to the south edge of Pepper Street) also contains a number of modern estates, Appleton Thorn prison and complex of mainly 1960s buildings present a visually confusing character. The architectural pallet is consequently diverse and ranges from red brick to metal cladding.

Built form and landscape character is illustrated in the photographs opposite.



Area 2C - Stretton & Appleton Moss

Stretton and Appleton Mosses form one contiguous, reasonably level area of mossland drained by a main ditch through the centre of the area that forms the parish boundary between the Stretton and Appleton. Field patterns are defined by ditches rather than hedge lines and are relatively large with sweeping views into the 'basin' area. The primary characteristics are listed below:

- Expansive views to south west from the M56 and a general absence of hedgerows and hedgerow trees;
- The area is rural in its character, open agricultural fields and airfields create further separation from the urban environment;
- There is no settlement within this area. A few small farms are scattered around the edges of the moss on the drier, non-peaty soils; and
- A mixture of traditional and modern construction typology varies from single storey bungalows to two storey semi-detached and detached houses.

The spatial character is illustrated in the photographs opposite.



Area 3A - Appleton Park & Grappenhall

The Appleton Park and Grappenhall areas form two parcels of land of similar character split by housing development associated with the A49 (London Road). The landscape character of these areas comprises falling land to the north, affording sweeping long distance views, occasionally restricted by the presence of linear deciduous woodland, coppices and tree groups. The presence of red sandstone frequently punctuates the landscape in the form of outcrops to road and canal cuttings, quarries and the building vernacular houses and walls. The primary characteristics are listed below:

- The rural character is defined by agricultural buildings and housing;
- The old core of the Thelwall village has been designated a conservation area with later development generally to the west;
- Grappenhall village centre is cut off from later development by the Bridgewater Canal. Unlike Thelwall, Grappenhall was originally sited half-way down the north facing slope of the escarpment, on the eastern side of a spur;
- The New Town housing at Grappenhall Heys occupies the north-western side of the higher ground;
- Wright's Green is a small row of houses along Lumb Brook Road of little architectural interest, with the exception of Wrights Green House; a Grade II listed building. A group of houses along Weaste Lane, close to the junction with Knutsford Road effectively form a ribbon development, comprising of generally modern houses; and
- The materials are predominately redbrick and redstone and slate roofs.

Built form and landscape character is illustrated in the photographs opposite.



Area 3B - Massey Brook

The catchment area of Massey Brook forms a sheltered landscape valley basin cut into the Red Sandstone Escarpment. The area is bisected and visually dominated by the M6 motorway running north/south between the Thelwall Viaduct and the M6 Stretton interchange at Junction 9. The landscape has broad open views both internally and to the north and east. Agriculture is mainly arable with intermittent hedgerows. A narrow linear band of deciduous woodland is associated with Massey Brook. The primary characteristics are listed below:

- Open views internally and to the north and east;
- The Massey Brook area is sparsely settled, a small number of noteworthy farm complexes and Thelwall Grange are the exceptions; and
- The development is predominately modern, residential dwellings vary from single storey bungalows to two storey terraced, semi-detached and detached houses.

Landscape and architectural character are illustrated on the photographs opposite.



Area 4C - Former Stretton Airfield

The former Stretton Airfield occupies an area of level ground situated adjoining the Appleton Thorn Trading Estate. In common with Burtonwood Airfield, the site is split into two sections by the motorway. To the north of the M56 a trading estate has developed over former runways. The land is unrestricted by any notable trees and is dominated by the motorway along its northern boundary. The primary characteristics are listed below:

- Level ground, visual and audible dominance of M56 motorway. Very large scale, open area, largely grassland with few trees. Absence of agricultural heritage;
- The character of the area is predominately industrial uses, employment and the former air field;
- There is no settlement within this area;
- Large industrial buildings and storage are form low density development; and
- Employment buildings of typical architectural character are the dominant building form.

The built and unbuilt form is indicated in the photographs opposite.



Technical Baseline Summary

Topography and Watercourses

The WGS area has subtly north-facing slopes which falls from London Road, towards Appleton Thorn, then across the central area to the edge of the Bridgewater Canal. (see Figure 3.2).

There are approximately 73 ponds/waterbodies, and six brooks (Bradley Brook, Massey Brook, Lumb Brook, Dingle Brook, Dodd's Brook and Dipping Brook), and numerous field ditches situated throughout the WGS area. Where possible the natural path of the watercourses within the site should remain. WBC Local Planning Policy QE 4- Flood Risk requires development proposals to avoid the use of culverting and building over watercourses.

A very small proportion of WGS is located in Flood Zone 3 (FZ3):

- Areas associated with the two unnamed Main Rivers located at the northern boundary of the site, east and west of A50 (Knutsford Road);
- Land along the western boundary associated with Dingle Brook; and
- Land adjacent to Massey Brook in the north east of WGS.

Development Framework Response

In accordance with Local Planning Policy QE 4- Flood Risk proposals should ensure the layout and design of the site is considered to provide opportunity for flood resilience methods and reduce flood risk in the development. This can be done by sequentially placing more vulnerable development in areas at lowest risk of flooding.

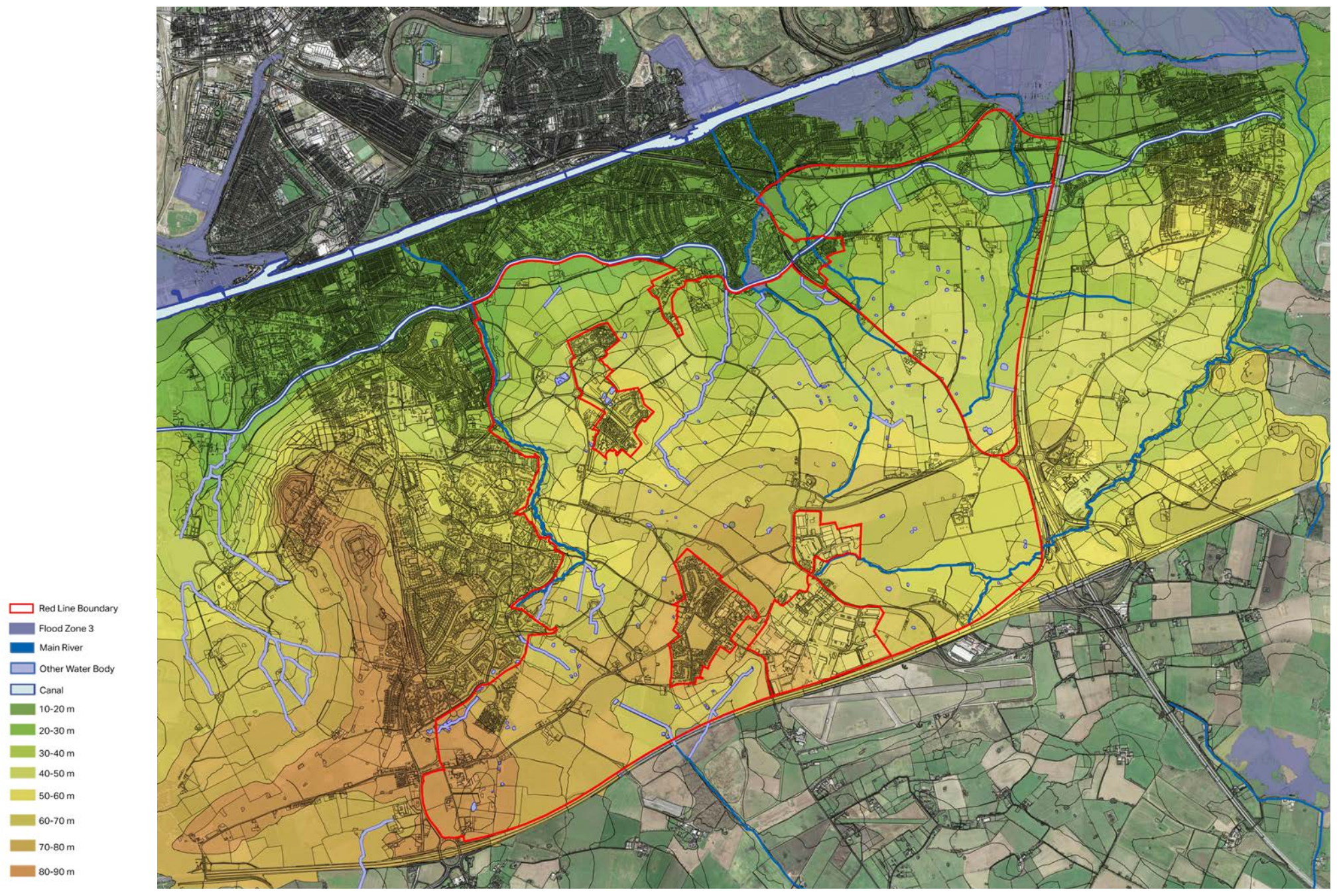


Fig 3.2: Topography and Watercourses

Environmental Designations

There are approximately 25 areas of deciduous woodland and thickets scattered throughout the WGS area, including ancient woodland. Woodlands range in size from approximately 0.5 – 13 hectares, with some deciduous woodland classed as priority habitat under Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance. Several local designated areas (Local Wildlife Sites) can be found along Appleton Edge, these areas are dominated by mature woodlands. The area incorporates Grappenhall Heys Local Wildlife Site that comprises a variety of deciduous and coniferous trees. (See figure 3.3)

Development Framework Response

In response to the environmental designation matters, the WGS development framework should embed the following principles:

- Retain and enhance existing woodland wherever possible as part of the overall green and blue infrastructure network;
- Incorporate Appleton Edge as a key settlement boundary with associated amenity value;
- Enhance existing wildlife corridors along the Bridgewater Canal and strengthen as a primary northern settlement boundary; and
- Create wildlife corridors along green infrastructure routes to improve links with other areas.

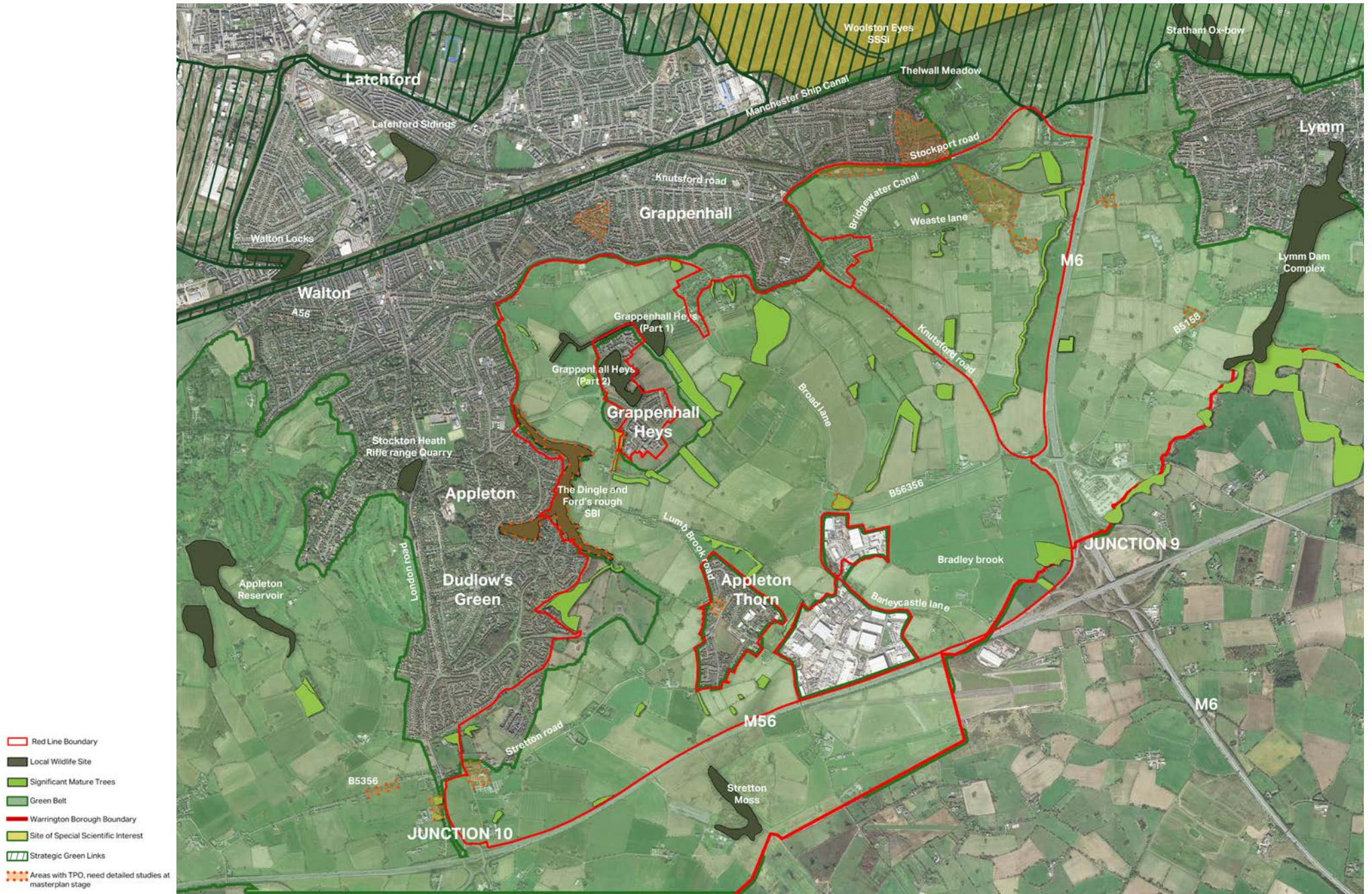


Fig 3.3: Environmental Designations

Heritage

The WGS area features of a number of historic assets, including three Ancient Monuments, National Grade II, II* and I Listed Buildings and Local Listed Buildings. (See figure 3.4)

There are six conservation areas within close proximity to Warrington Garden Suburb. Greenalls Brewery and Stockton Heath Conservation Areas to the north- west;, Grappenhall & Stockton Heath and Grappenhall Village Conservation Areas to the north; and Thelwall Village Conservation area is to the north-east.

Grappenhall Village Conservation area is the only one that extends into the development site. It lies to the south-east of Warrington town centre, and to the south of both the River Mersey and the Manchester Ship and Bridgewater Canals. Most of the buildings are late 17th century or 18th century, constructed mainly from rendered brick with slate roofing. Some cobbled streets add a picturesque quality to the scene.

Historic Scheduled Monuments

There are two Historic Scheduled Monuments within the area Bradley Hall moated site and two sections of Roman road between Appleton and Stretton.

Bradley Hall moated includes an island which is partially occupied by a modernised farmhouse and garden but which was formerly occupied by Bradley Hall Manor House. The site is a good example of a moated medieval manor house; the moat itself survives in good condition and remains full of water. Remains of two earlier building phases of Bradley Hall will survive beneath the present house and gardens.

The record for two sections of Roman road between Appleton and Stretton has been generated from an "old county number" (OCN) scheduling record. Being from Historic England's oldest designation records, there is no information held electronically.

Listed Buildings

There are a number of Listed Buildings within the WGS area, which are both Locally and Nationally Listed. The majority of the Nationally Listed Buildings are Grade II listed. Grappenhall Village Conservation area incorporates the Grade I Church of St Wilfrid and the Grade II* listed Tanyard Farm to the south-east. The majority of historic designations are located in the northern part of WGS, along Bridgewater Canal and Grappenhall Heys. There are also a number of Listed buildings alongside B5356, Appleton Thorn and Appleton Thorn Trading Estate.

Development Framework Response

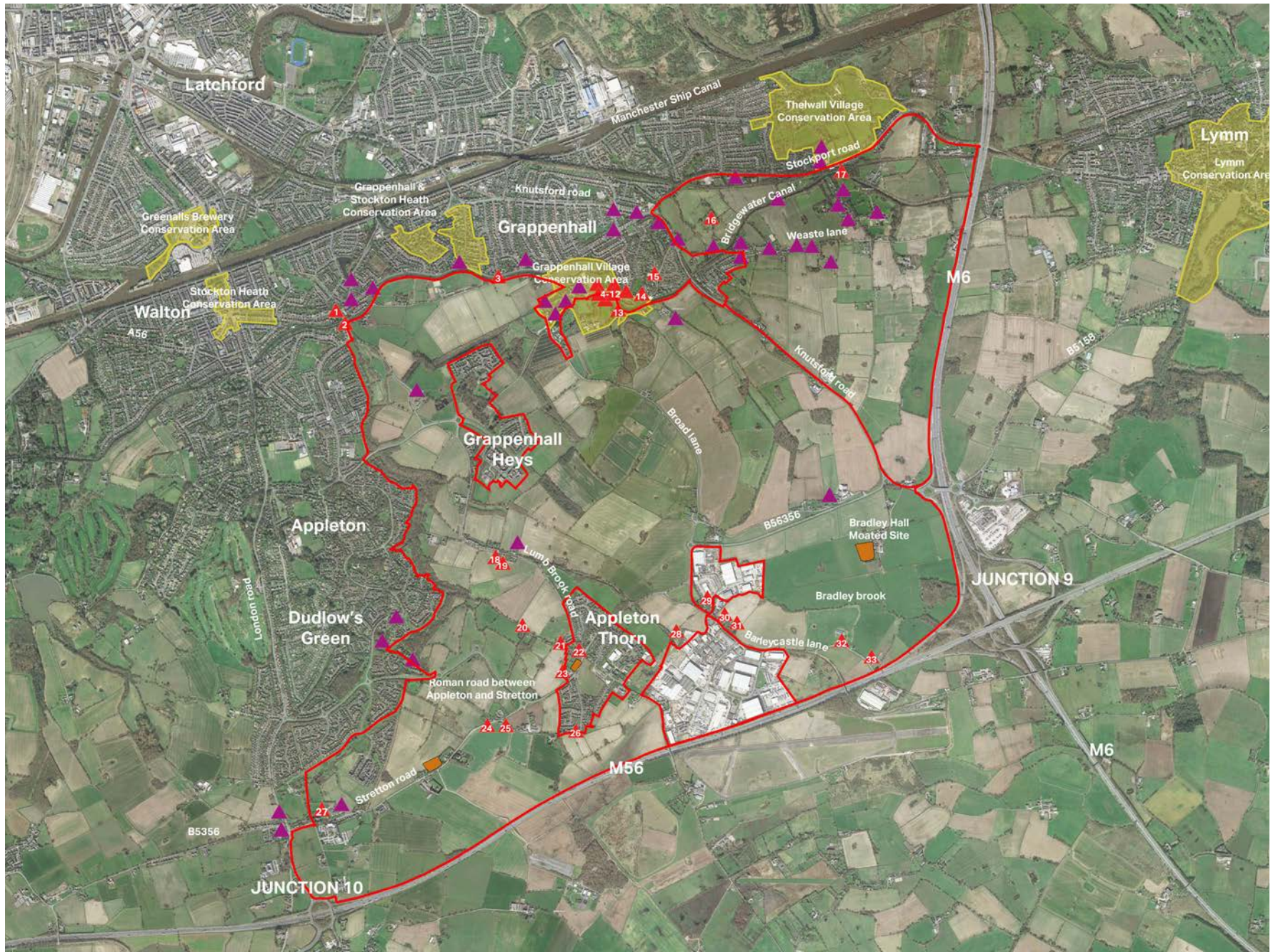
Historic designations should be embedded into the WGS Framework thereby enhancing contextual links to the place and maintaining distinctiveness.



Grade II Listed St Mathew's Church



Grade II* Listed Tanyard Farm building



-  Red Line Boundary
-  Conservation Areas
-  Listed Building
-  Local List Parish Order
-  Scheduled Monument

Fig 3.4: Heritage Assets

Vehicular Movement Networks

WGS is well connected to the primary vehicular network being adjacent to the M56/M6 interchange junctions. London Road (A49) and Knutsford Road (A50) provide north-south connections from WGS to Warrington Town Centre. The B5356, runs west-east via Appleton Thorn, connecting London Road to Knutsford. Broad Lane, from Grappenhall, connects the B5356 and provides links further north, beyond the Bridgewater Canal.

As a consequence of the area being predominantly farm land, WGS only has a small number of bus routes at present. The Number 8 bus route enters the site via Witherwin Avenue from Appleton, and then travels through Grappenhall Heys via Lumb Brook Road and Appleton Thorn, looping to Appleton via London Road from the south.

A number of bus routes currently service the wider area, providing links to Warrington, Lymm and the wider adjacent communities.

Development Framework Response

A fundamental upgrade of the existing vehicular movement network will be required in response to the scale of change envisaged as part of WGS. Where possible this should utilise existing road infrastructure, recognising that these corridors provide linkages to established communities and businesses. New road infrastructure will need to be phased to connect new development, create public transport loops to encourage patronage and be of a physical scale that will change over time.

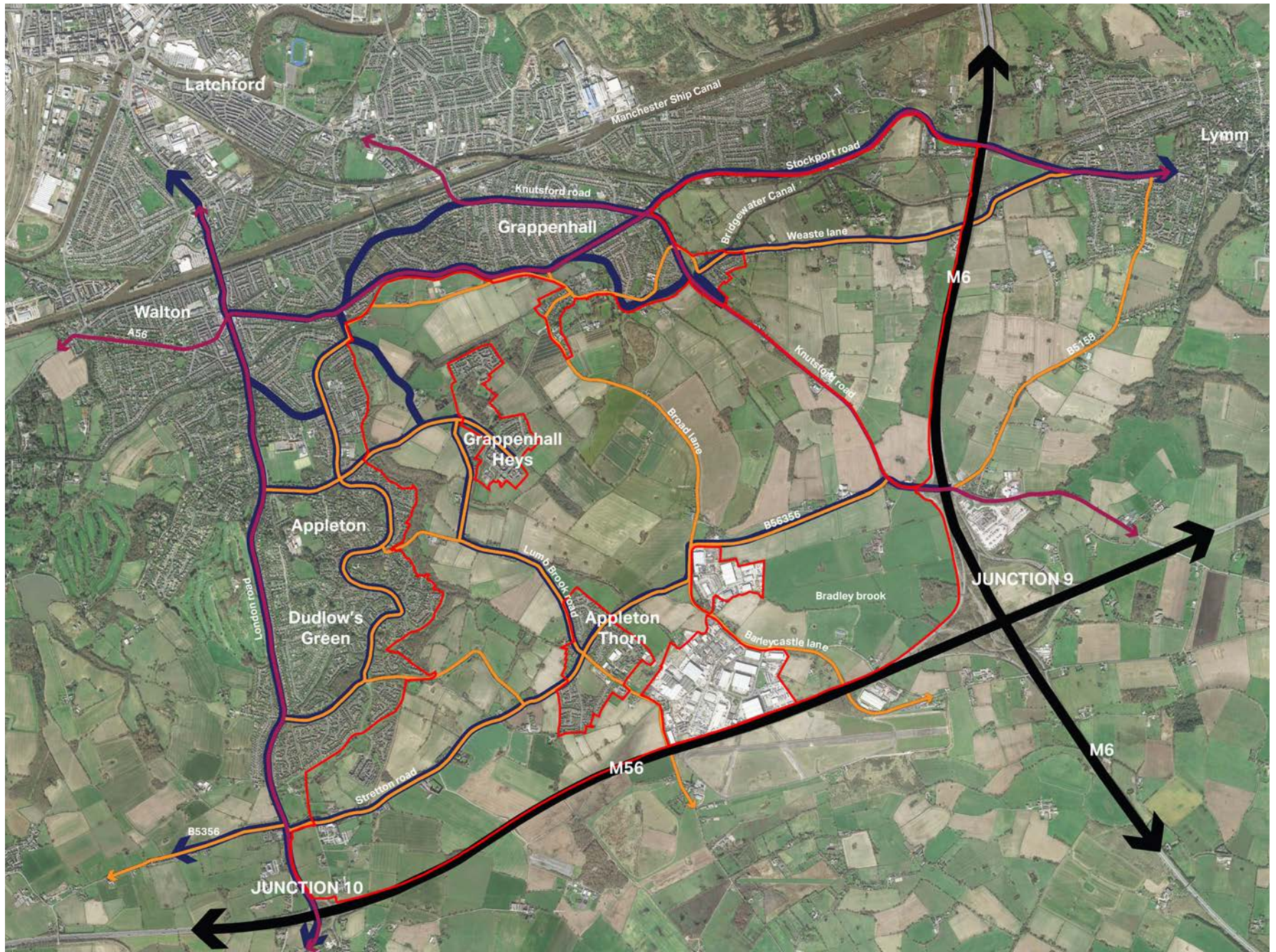


Fig 3.5: Vehicular Movement

Non-vehicular Movement Networks

There are two strategic long distance trails running in along the northern extent of WGS. The Trans Pennine Trail (cycling and walking) runs alongside the Manchester Ship Canal and cuts through the northern corner of the site via a disused railway. Another long distance trail, the Mersey Valley Trail, overlapping with the Cheshire Ring Canal Walk, also runs along the northern boundary of the site, mainly alongside the northern side of the Bridgewater Canal.

There are a number of existing, dedicated Public Rights of Way (PRoWs) within and surrounding WGS, as illustrated in Figure 3.6, opposite.

A number of PRoWs in Dudlow Green, Grappenhall and Appleton Thorn also link WGS to its wider context.

Development Framework Response

Established routes and PRoWs should be recognised and reinforced as part of the WGS Framework. These routes can consequently strengthen sense of place and in combination with other matters such as green infrastructure arrive at an efficient multifaceted structure.

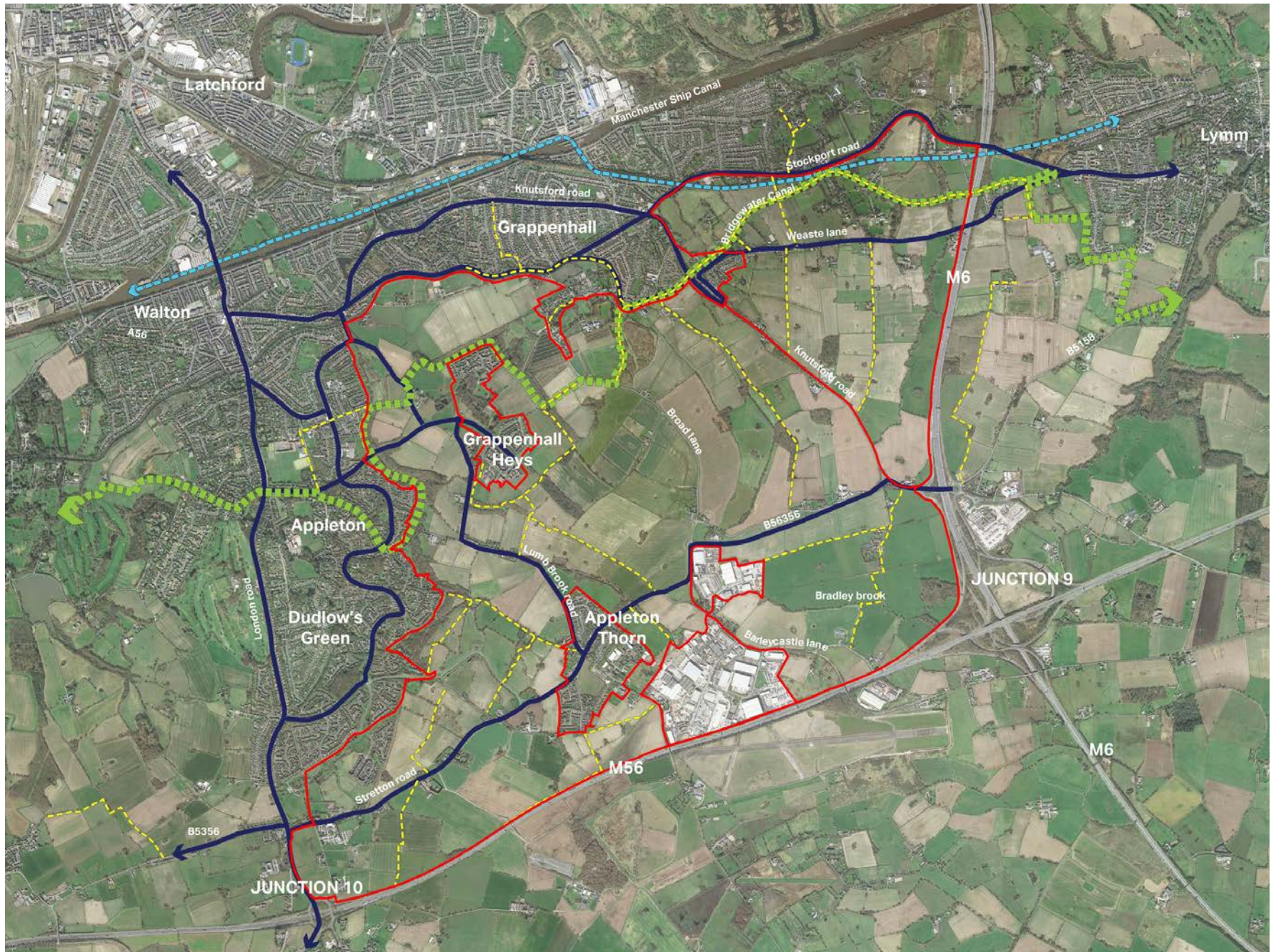


Fig 3.6: Non-Vehicular Movement

Utilities

The distribution company responsible for maintaining the water supply infrastructure in the area is United Utilities. United Utilities have distribution and trunk mains located throughout WGS, providing potable water to existing properties. United Utilities have not been able to confirm whether the existing infrastructure can accommodate the proposed development requirements at this stage but as a consequence of the size of development, it is assumed that there will need to be upgrades to the existing infrastructure.

SP Energy Networks has range of apparatus within the vicinity of WGS including low and high voltage, 33kV cables and overhead lines. The 33kV cable runs through the centre of the site as shown in Figure 3.7. The apparatus provides connections to residential, commercial and industrial properties. Following consultation, SP Energy Networks has confirmed they will need to reinforce the network in order to accommodate the approximate 10,000kVA of new power required to provide capacity for both electric and gas heating for the proposed residential and commercial properties.

Cadent Gas Ltd has low pressure (LP), medium pressure (MP) and intermediate pressure (IP) gas mains located throughout WGS. The IP gas main runs into the northern part of the site, adjacent to Chester Road.

Penspan Gas Main with associated COMAH zones crosses the site from west to east, north of the B5356 (Stretton Road/Grappenhall Lane). This is a nationally important infrastructure asset that will require easement within the WGS framework.

Development Framework Response

Where possible existing utilities infrastructure should be left intact and integrated within green corridors and alongside new movement networks. This will improve the efficiency of the layout whilst reducing unnecessary costs associated with relocation.

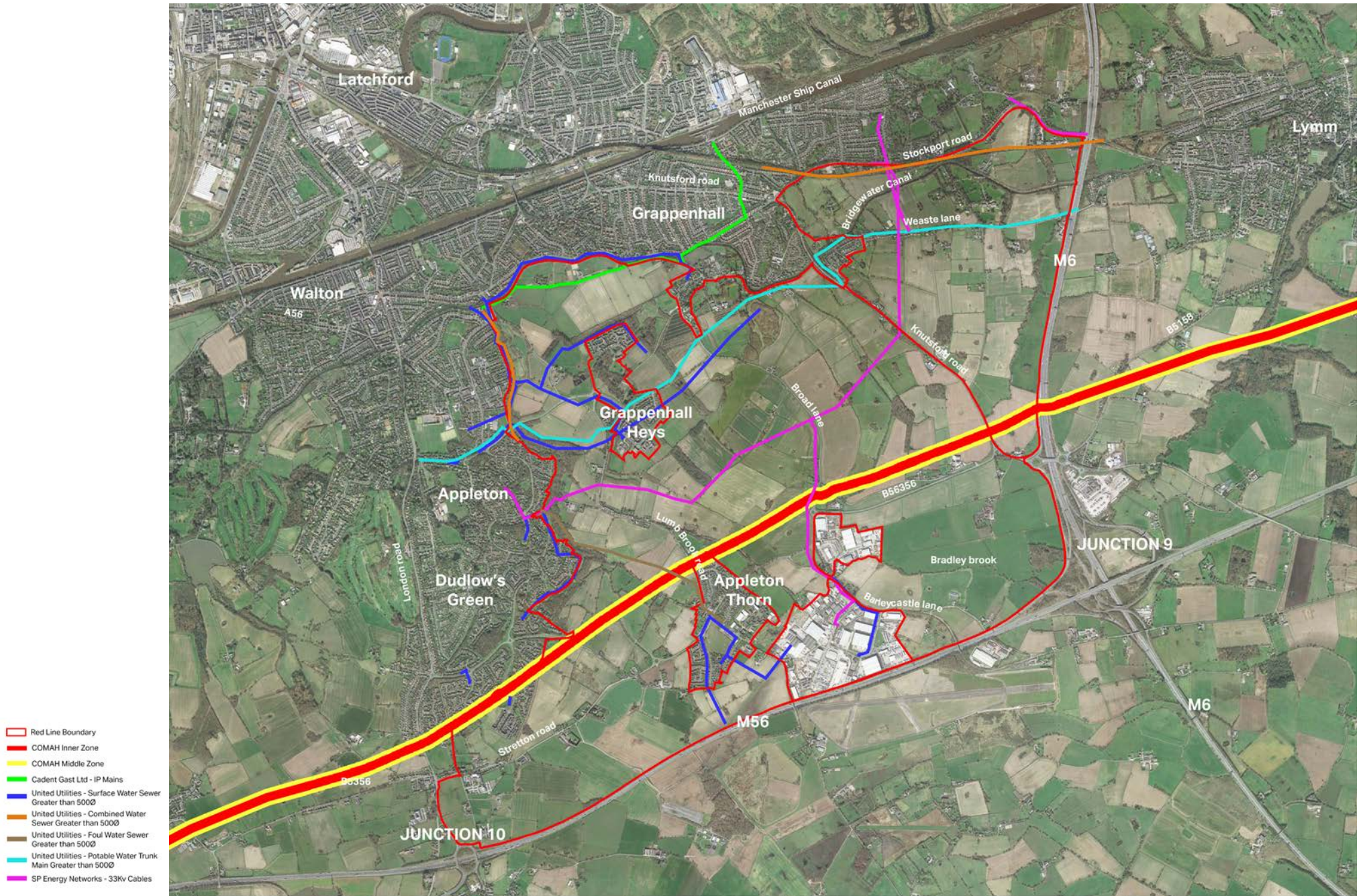


Fig 3.7: Utilities Constraints

Combined Technical Constraints

The combined constraints mapping illustrated in Figure 3.8 opposite provides a first step in the formation of an integrated, holistic response to physical place that can accommodate major assets and adapt to areas of change over time. This should include the following overarching opportunities and objectives:

Opportunities

- Development parcels to work with topography and integrate water courses into green corridors;
- Provide strategic green space that works with existing woodland and creates a buffer between the existing built environment and WGS;
- Safeguard and positively contribute to Warrington's heritage and assets delivering high quality contextual design solutions;
- Improve the existing transport network providing better links with the Town Centre, incorporate sustainable modes of travel, providing better public transport and non-vehicular links; and
- Integrate the proposed infrastructure network with transportation and green corridors in order to achieve layout efficiencies.

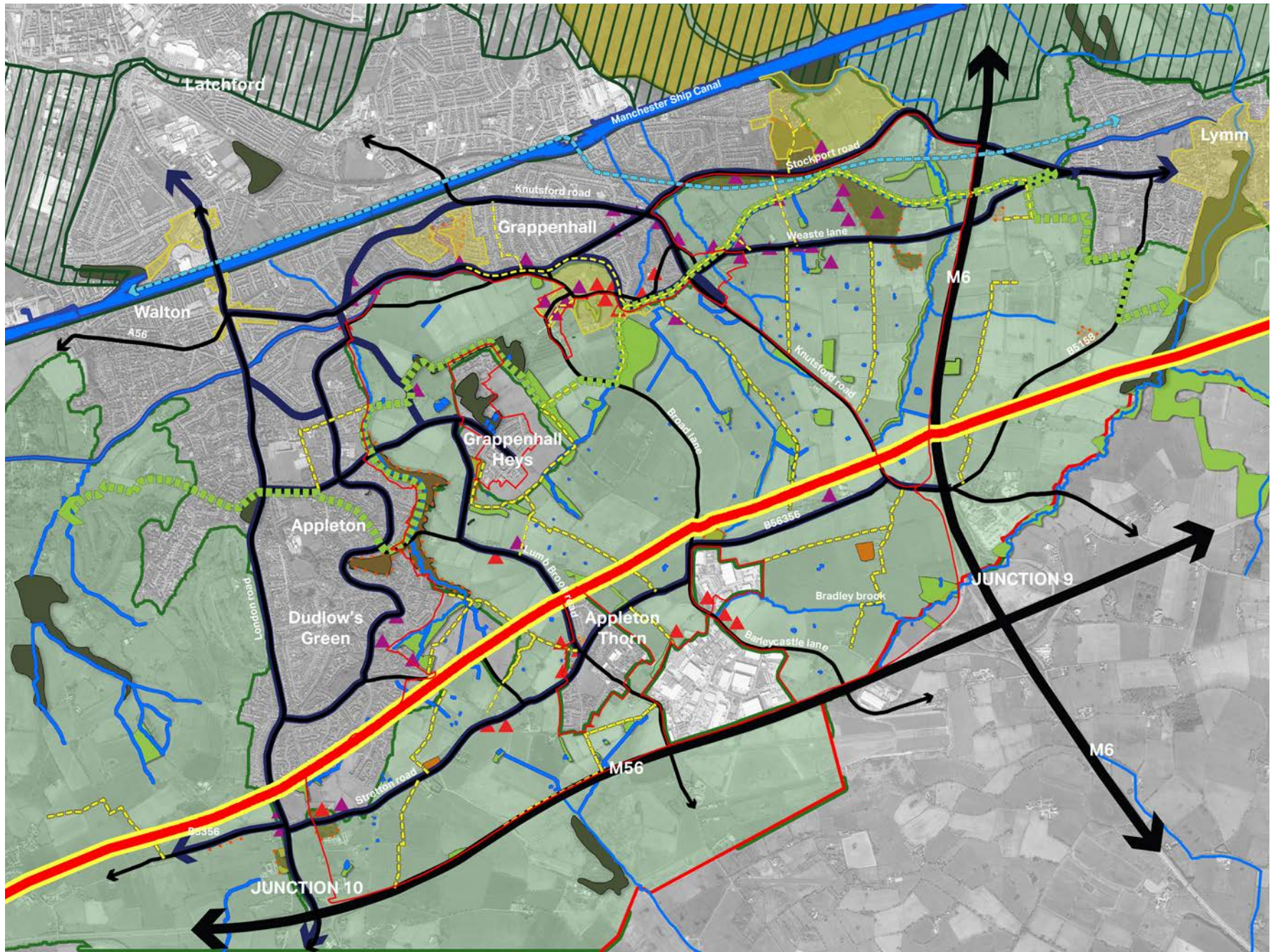


Fig 3.8: Combined Constraints



Options & Engagement

04

Engagement and Evaluation of Options

This section of the document provides a summary of stakeholder and developer engagement that was undertaken to inform evolution of a preferred framework for WGS. Two strands of meetings took place in this context:

1. Workshops and follow up presentations to WBC (planning and highways), Warrington+Co, Highways England, Natural England and United Utilities; and
2. Individual presentations to developers and interested landowners identified through the call for sites process.

WBC Workshop

The vision workshop was held over two days from the 16th to 17th of May 2018. Day one provided general project background to WGS, the plan progress, market context and a summary of the technical baseline covered in Section 3 of this report. This fed into a discussion around the 'Essence of Place' and the primary objectives that need to be achieved through the WGS Development Framework. The conversations centred around three primary areas:

Local Plan Context

WBC provided confirmation of the primary consultation feedback:

- Developer interest is high including some pushback of safeguarded land;
- Developers outside of Warrington have questioned the ability to deliver and too much development in one place;
- Local concerns included:
 - WGS will fundamentally change the character of the place;
 - Infrastructure will not come forward at the same rate; and
 - Air quality and lack of public transport.
- Affordability of new homes (mismatch between employment area and homes proposed);
- The Neighbourhood Centre will be an out of town retail park; and
- Government and Homes England are very supportive of the growth aspirations.

Reviewed Aims of the Commission

The discussions and comments allowed a review of the most important aims of the commission:

- Define scale and type of development;
- Define required social and physical infrastructure;
- Use as a vehicle to build consensus;
- Demonstrate deliverability;
- Support and integrate with the Local Plan;
- Understand existing character and minimise impact;
- Create a flexible development framework that can flex over time;
- Concentrate on placemaking;
- Explore how health provision could be integrated into the community; and
- Understand land ownership and phasing.

Technical Baseline Comments

In response to the summary Technical Baseline the following comments were made:

- 80m level change across the whole of WGS but changes in plots are not significant;
- Need to zoom out to appreciate the wider green/ ecological corridors and linkages;
- Currently poor connections into town centre with limited public transport;
- There are numerous physical barriers such as crossing the Manchester Ship and Bridgewater Canal;
- Ensure internal connectivity for walking//cycling and public transport loops;
- Unlikely a hospital will be required on site, allow for large primary care facility; and
- Need to understand catchment areas for schools. Need to understand character and existing assets.

A round table design review followed that tested some of the observations through creation of three draft design scenarios.

The scenarios were drawn up 'more formally' overnight to allow day two to commence with a full room design critique; the three options were discussed and relative merits considered.



Concept Options

The three options generated during the May 2018 design workshop are illustrated below with an accompanying summary of the key relevant variances.

OPTION A

- Warrington Town Centre link as per 2017 Plan utilising Latchford Spur Rail Line to cross the Manchester Ship Canal.
- Larger offset to scheduled monument than on previous 2017 plan.
- Neighbourhood Centre located to the east of the Masterplan area.
- Country Park located to the north of the Neighbourhood Centre.

OPTION B

- Crossing at Ackers Road Bridge (either larger replacement or new bridge alongside), creating a new link south that connects to Chester Road (A56) and over the Bridgewater Canal.
- More centralised Neighbourhood Centre adjacent to the Country Park and employment area with residential development to the east and west.
- Creation of employment land close to the motorway junction.
- A new Country Park linking between Grappenhall and the new Neighbourhood Centre.
- Primary route links directly into Junction 10 of the M56 roundabout.

OPTION C

- Creation of a new bridge which runs alongside Latchford Spur Rail Line to cross the Manchester Ship Canal and connect to the Town Centre.
- The Neighbourhood Centre is located further east in order to achieve a stronger relationship with the A50.
- The new Country Park is located between Grappenhall Heys and Grappenhall to the north of the masterplan area and is separated from the Neighbourhood Centre.

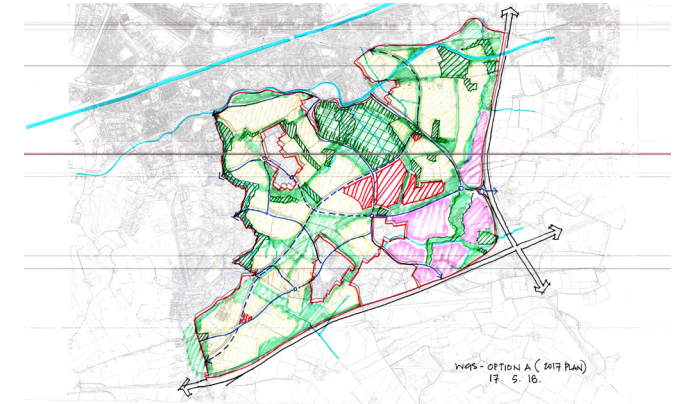


Fig 4.1: Option A

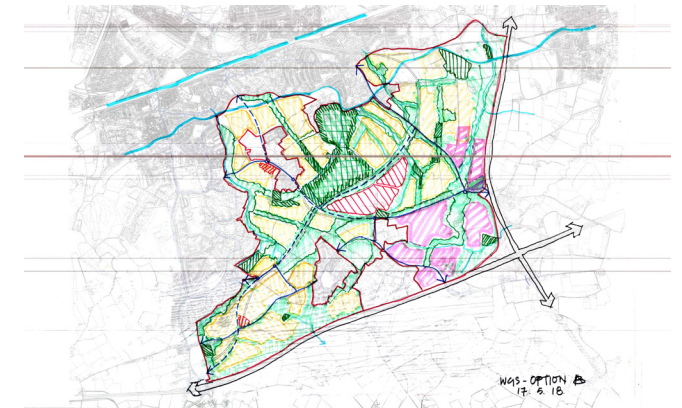


Fig 4.2: Option B

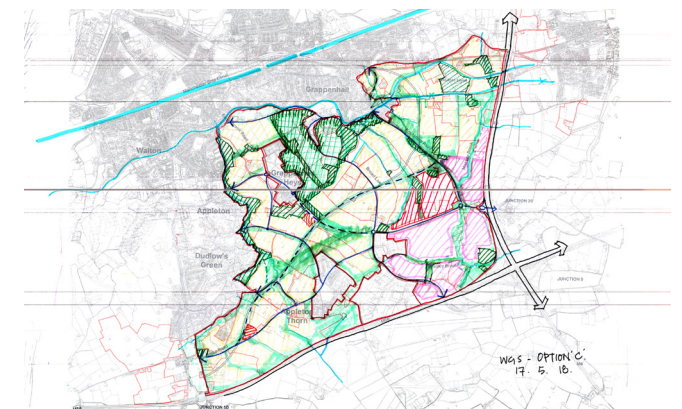


Fig 4.3: Option C

Preferred Option

As an initial response to the workshop Option B was seen as the preferred approach; a layout that achieves the primary objectives set for WGS whilst maintaining the 'Essence of Place'.

Following the workshop Option B was further refined and tested against physical constraints and trajectory objectives. This option was also used as a basis to update developers and landowners on the chosen direction of travel. (See figure 4.4)

Engagement with Developers

Throughout the evolution of the framework options and subsequent evaluation of the preferred options presentations have taken place with the major developers and landowners with interests in WGS. This has included a series of 'one-to-one' meetings, review and assimilation of developer proposals (where available), and reaction to feedback where provided. The engagement process culminated in a group presentation to all of the developer/landowners on 9th January 2019; this presentation recapped the context and primary influences over the agreed framework as well as confirming the overall development capacity and trajectory.

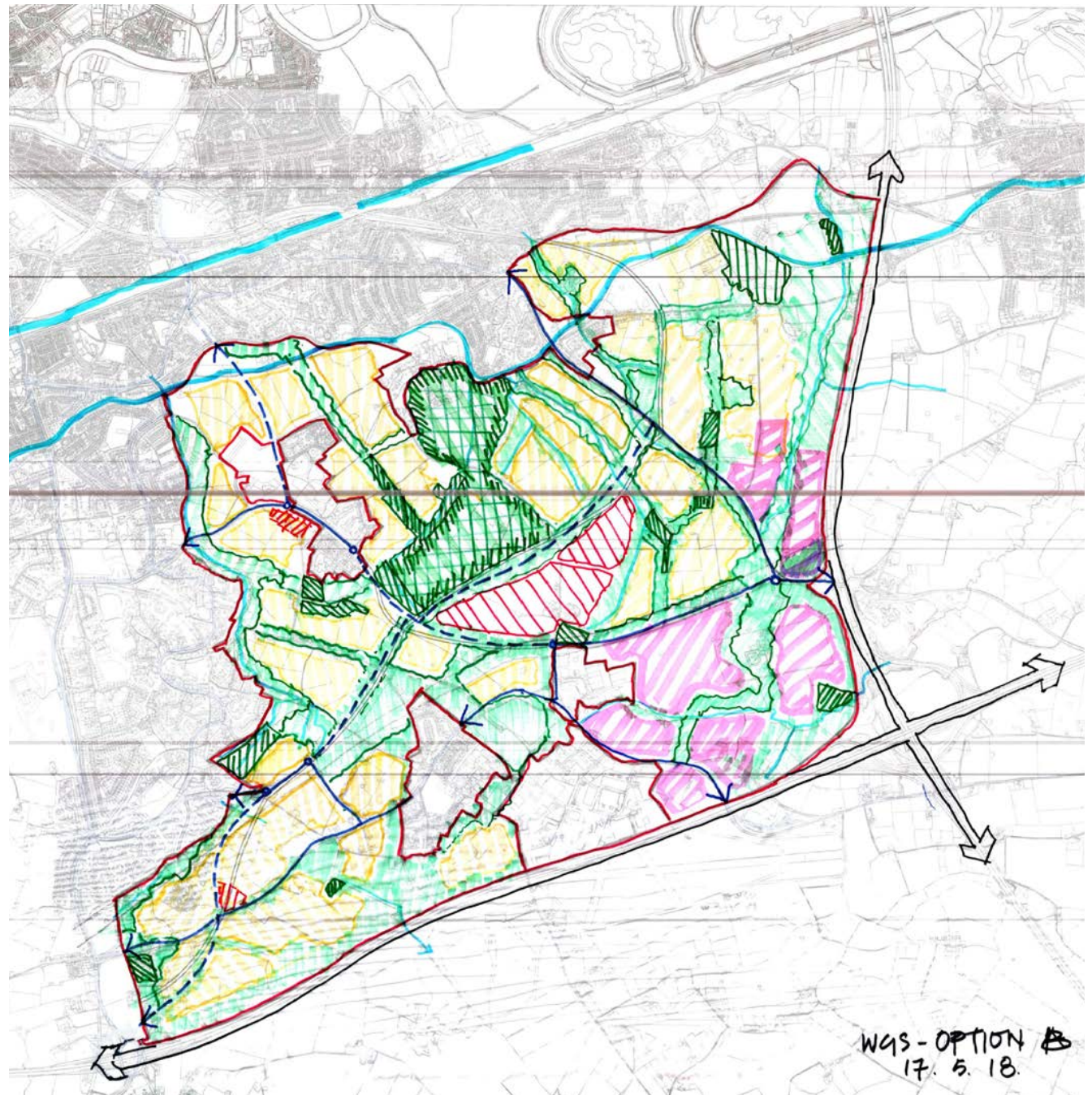


Fig 4.4: Warrington GS Preferred Option Sketch



Garden Suburb Development Framework

05

Development Framework Structure

The diagram opposite (Figure 5.1) describes the Development Framework structure that has been generated through analysis of the preferred option. It illustrates a series of new communities or 'villages' focused around a strong Neighbourhood Centre all harmonised through green corridors that are both functional; doubling up as primary infrastructure connections and structural; defining settlement boundaries.

The primary components of the WGS Development Framework are as follows:

- A Neighbourhood Centre, located at the heart of WGS will act as both the focus for activity, combining major community facilities such as the secondary school, health and retail and as the primary crossing point of four routes, thereby becoming the functional hub of the new community.
 - The Neighbourhood Centre is physically close to new residential areas, the employment land and proposed Country Park. It is consequently hoped that it will promote sustainable travel through good accessibility from walking and cycling routes.
 - Three new residential 'villages' radiate from this central hub area, all with their own distinct character and potential scale. The concept allows development of new housing to commence from multiple sites at the same time, consequently increasing delivery rates and the critical mass of development.
 - Each village will potentially incorporate its own Village Centre with a local primary school and amenity facilities that will serve the immediate neighbourhood.
- The proposed employment area builds on established uses at Appleton Thorn/ Barleycastle Industrial Estate with a new area extending through to the junction of the M6 and M56.
 - A new Country Park extends south from Grappenhall through to the Neighbourhood Centre, with direct physical boundaries to two of the residential villages and a strong green corridor to the third. The Country Park is of a scale that will be able to accommodate a range of different junctions from formal open space and recreation to more naturalistic areas focused on habitat and environmental considerations. It is envisaged that the Country Park will be an early delivery objective but phased overtimes as WGS evolves.

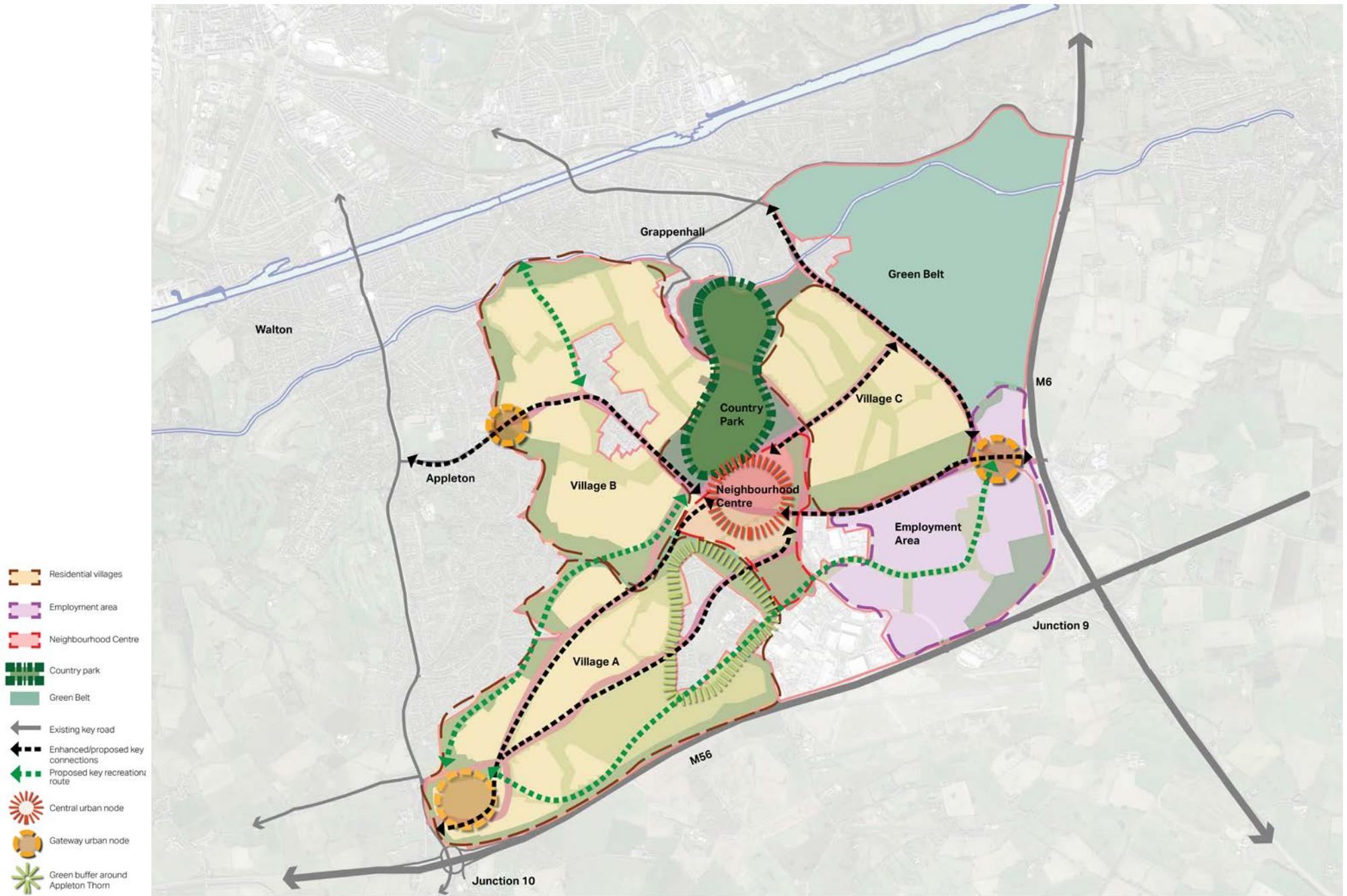


Fig 5.1: Development Framework Structure

Vehicular Movement Structure

WGS will incorporate an enhanced vehicular movement network through a series of new and upgraded routes. These improvements will be phased over time in response to development trajectory and in order to link new and existing communities.

The overall objective will be to use this network to improve linkages to the Town Centre, particularly through an enhanced public transport networks that generate greater patronage of the routes by users and consequently yield superior viability to public transport operators.

The primary loop is seen as the principal public transport corridor linking back to Warrington via the A49 and A50. (See Figure 5.2).

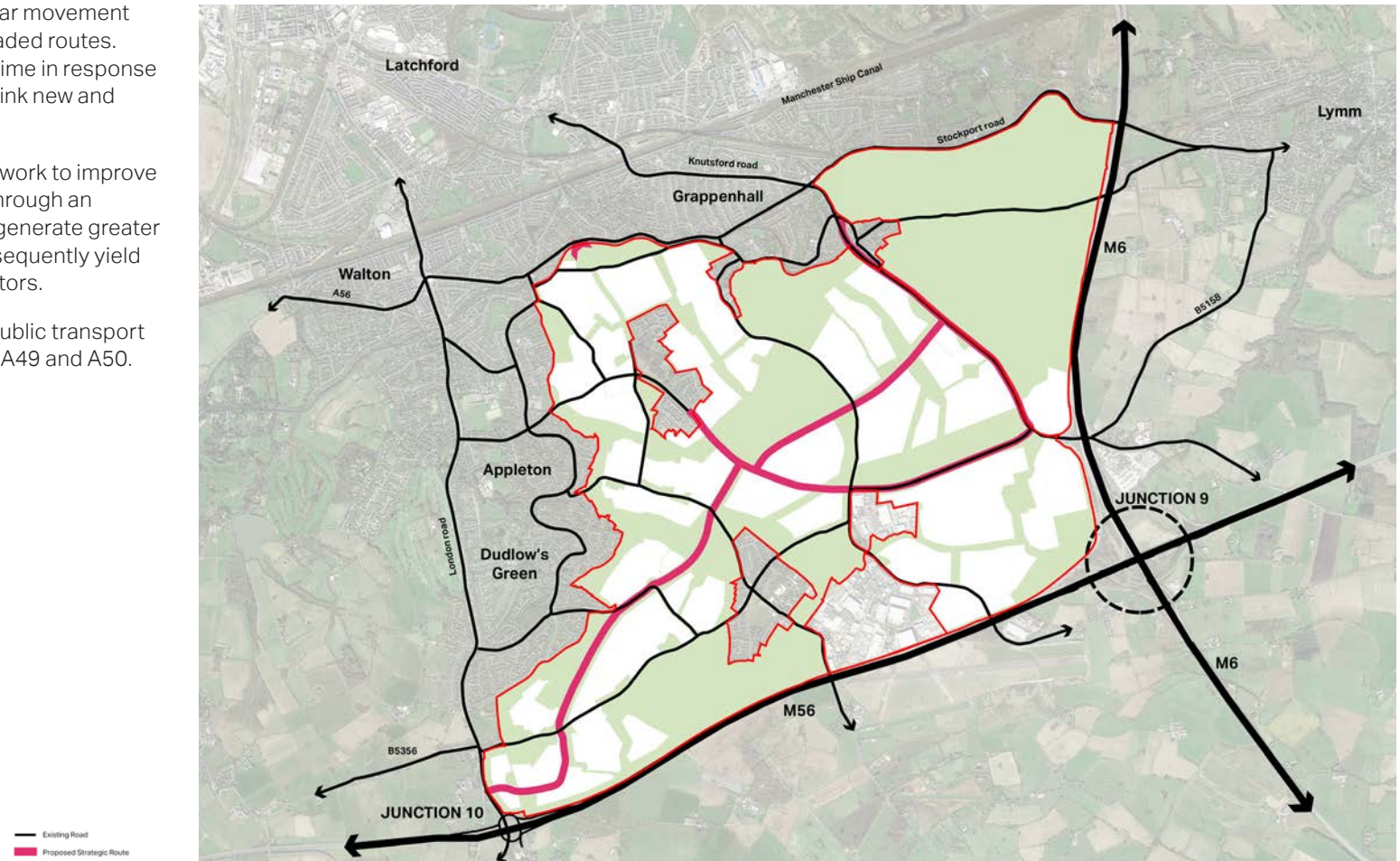


Fig 5.2: Vehicular Movement Structure

Non-vehicular Movement Structure

The proposed WGS non-vehicular network will build on existing, established footpaths and cycle/bridleways. The diagram opposite (Figure 5.3) indicates the potential location of these routes that have also been integrated with proposed green infrastructure to ensure that all areas of WGS are accessible by non-vehicular modes in attractive, car free environments.

Cycle routes have been shown in a format that follows wider, WBC classification; these routes will sit alongside new/upgraded vehicular routes and provide viable alternatives to connect into the Town Centre and public transport hubs.

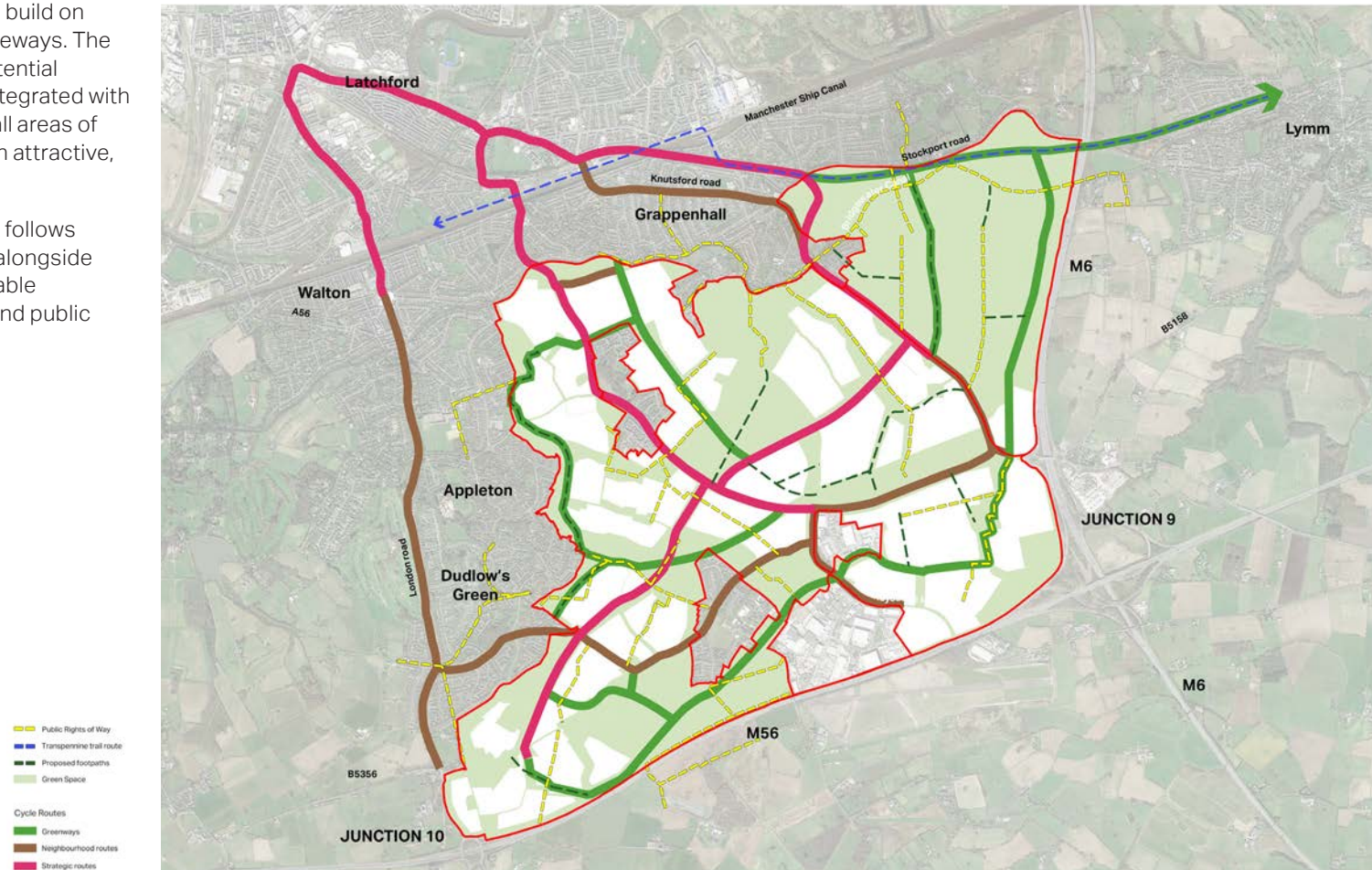


Fig 5.3: Non-vehicular Movement Structure

Key areas of green space and the envisaged Green Network

The proposed WGS Green Network is a fundamental building block of the Framework. It is formed around four main elements which will contribute towards creating a sustainable, locally responsive, high quality environment (see Figure 5.4). The hierarchy of green infrastructure is summarised below:

- A new Country Park will become a main destination for recreation providing improved visual and physical contribution to new/established communities, existing listed buildings, mature woodlands and watercourses.
- It will be interlinked with a series of Strategic Green spaces which are not only designed to provide permeable sustainable amenity routes but also create distinct settlement boundaries to the proposed villages.
- The proposed green buffers define the WGS boundaries, provide the required separation to established housing areas and enhance permeability and sustainability of the area.
- Open spaces within the villages will form smaller scale green infrastructure and create local destinations for recreation, sustainability and activity.

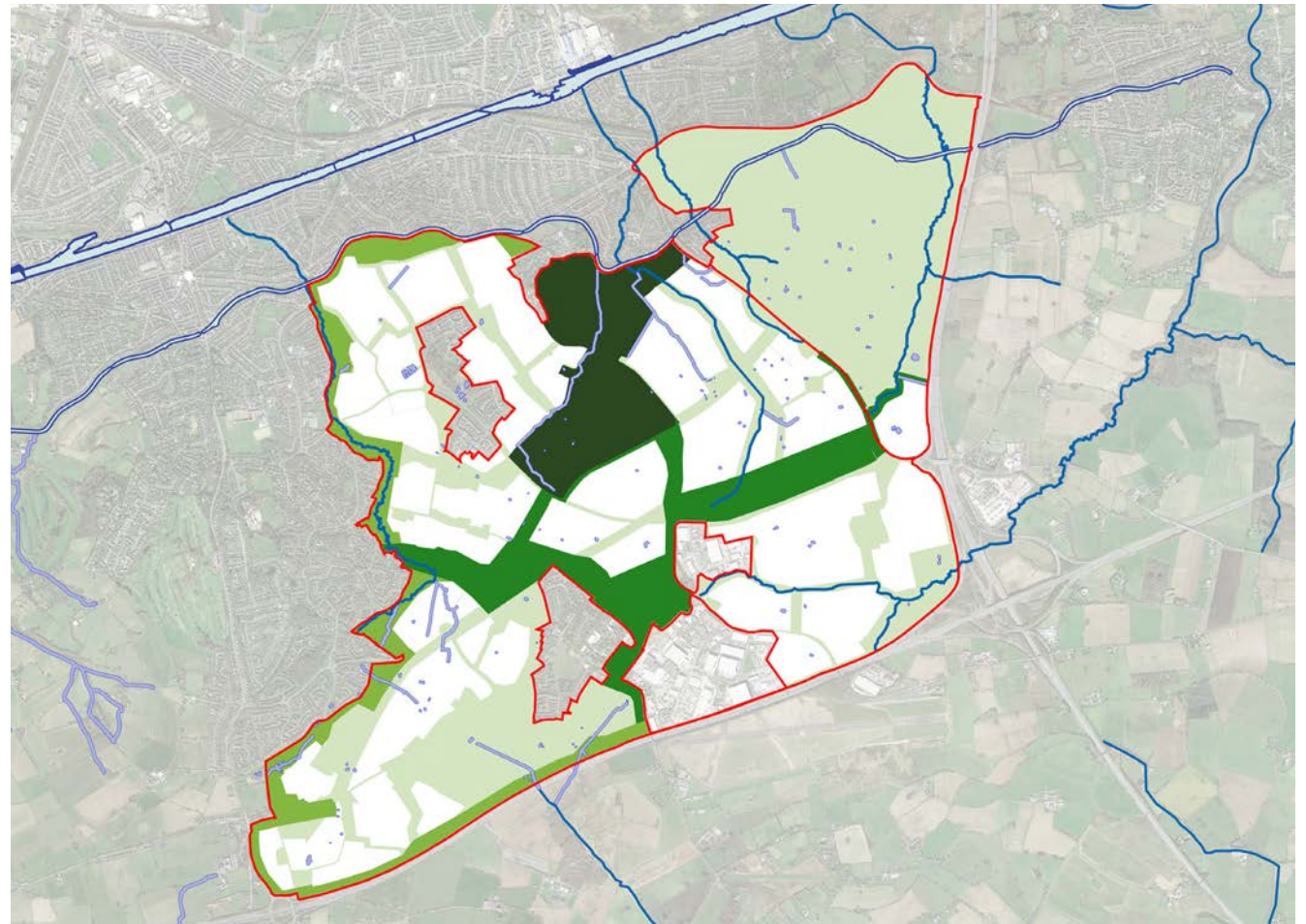


Fig 5.4: Green Network

Community & Social Infrastructure

A fundamental ambition for WGS is the creation of a new sustainable community in south Warrington. Hand in hand with this requirement is the ability to deliver the desired level of social infrastructure in parallel with housing and employment, thus an associated sense of belonging.

Two primary factors have influenced the provision of social and community infrastructure within the WGS framework:

- Distribution of a range of facilities throughout the whole area to ensure as far as possible that facilities are accessible within a short walk/cycle;
- Scale of facilities that accord with WBC policy requirements and the number of dwellings envisaged. The Neighbourhood Centre has been positioned at the heart of WGS; it could accommodate new education facilities (both secondary and primary), health and leisure, retail and higher density housing.

Each of the three residential villages will incorporate a Village Centre including the potential for a new primary school and ancillary community/leisure/retail facilities. (See Figure 5.5).

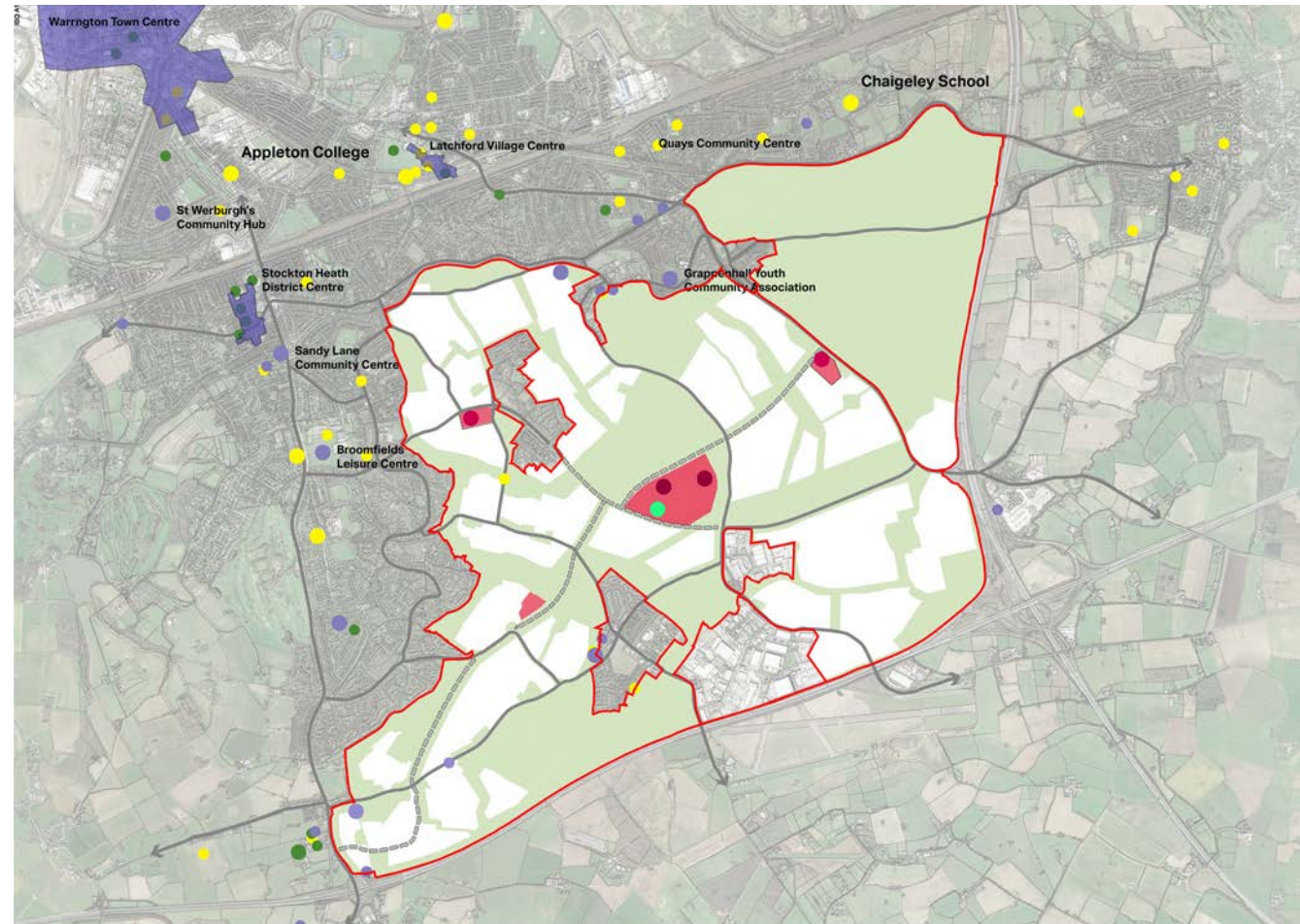


Fig 5.5: Community & Social Infrastructure

Land Use

The final land use framework plan that has emerged through the design, development and engagement process is illustrated in Figure 5.6, opposite.

It formalises the principles set out in the framework structure and importantly defines the land take, development schedules and associated trajectory that has been used to inform both Local Plan discussions and commercial viability iterations. Numerous phasing alternatives have been tested through this process, examining the impact on phased delivery of infrastructure as well as the relationship with greenspace over time. The resulting land use approach is considered to be optimum scheme that will achieve the overall strategic objectives whilst maintaining the required long-term flexibility.

Approximate development areas for each land use, including green space, is confirmed in the tables opposite.

Land Use for Warrington Garden Suburb

Land Use	ha	acre	Note
Neighbourhood Centre	19	46.9	
Employment Land	116	286.6	Footprint: 406,000 square metre, based on 35% of land area
Residential	351.3	868.1	
3 Village Centres	6.9	17.1	
Country Park	89	219.9	
Proposed Strategic Road	14.7	36.3	
Greenbelt and Open Countryside	622.5	1538.2	
Total	1237.6	3013.2	

Village Centres

Parcel	Gross Parcel Area (ha)	Gross Parcel Area (acre)
VC1	1.9	4.6
VC2	2.5	6.2
VC3	2.5	6.2
Total	6.9	17.0

Warrington Garden Suburb Residential

Area	Parcel	Gross Parcel Area (ha)	Gross Parcel Area (acre)	Potential Number of Units (Gross Density @20 dph)	Homes England Land Confirmed Unit Numbers (Planning Apps)	
A	A1	4.8	11.9	96		
	A2	8.5	21.0	170		
	A3	7.3	18.0	146		
	A4	12.7	31.4	254		
	A5	7.4	18.3		180	
	A6	29.7	73.5	595		
	A9	8.6	21.3	172		
	A10	3.3	8.1		350	
	A11	13.0	32.1			
	A12	5.9	14.7	119		
	B	B1	16.4	40.5	328	
		B2	14.6	36.1	292	
B3		10.0	24.7	200		
B4		8.0	19.8	160		
B5		21.2	52.5	425		
B6		11.3	27.9	226		
B7		15.9	39.2		400	
B8		2.8	6.9			
B9		7.0	17.3	140		
B10		7.1	17.5	142		
B11		15.4	38.0	307		
B12		11.2	27.7	224		
C	C1	15.9	39.2	317		
	C2	10.8	26.7	216		
	C3	12.4	30.7	249		
D	D3	8.7	21.5	174		
	D4	4.4	10.8	87		
	D5	16.0	39.5	320		
	D6	20.6	50.9	412		
Total		330.8	817.3	5,770	930	

Surrounding Neighbourhood Centre Area (Higher Density Residential)

Area	Parcel	Gross Parcel Area (ha)	Gross Parcel Area (acre)	Potential Number of Units (Gross Density @30 dph)
D	D1	11.8	29.1	353
	D2	8.7	21.6	261
Total		20.5	50.7	614

District Centre Area (Higher Density Residential)

Area	Parcel	Gross Parcel Area (ha)	Gross Parcel Area (acre)	Potential Number of Units (Gross Density @30 dph)
Neighbourhood Centre	NC	3.5	8.6	105

Potential Number Units INCLUDING Homes England Land: 7,420 (Phases 1-4)

Potential Number of Units EXCLUDING phase 1 Homes England Land: 6,490 (Phases 1-4)

Warrington Garden Suburb Employment Area

Area	Parcel	Gross Parcel Area (ha)	Gross Parcel Area (acre)
E	E1	40.9	101.1
	E2	23.5	58.1
	E3	12.6	31.1
	E4	17.6	43.5
	E5	8.8	21.7
	E7	12.4	30.6
	Total		116

Footprint: circa 406,00 square metre, based on 35% of land area

Table 5.1: Land Use Areas

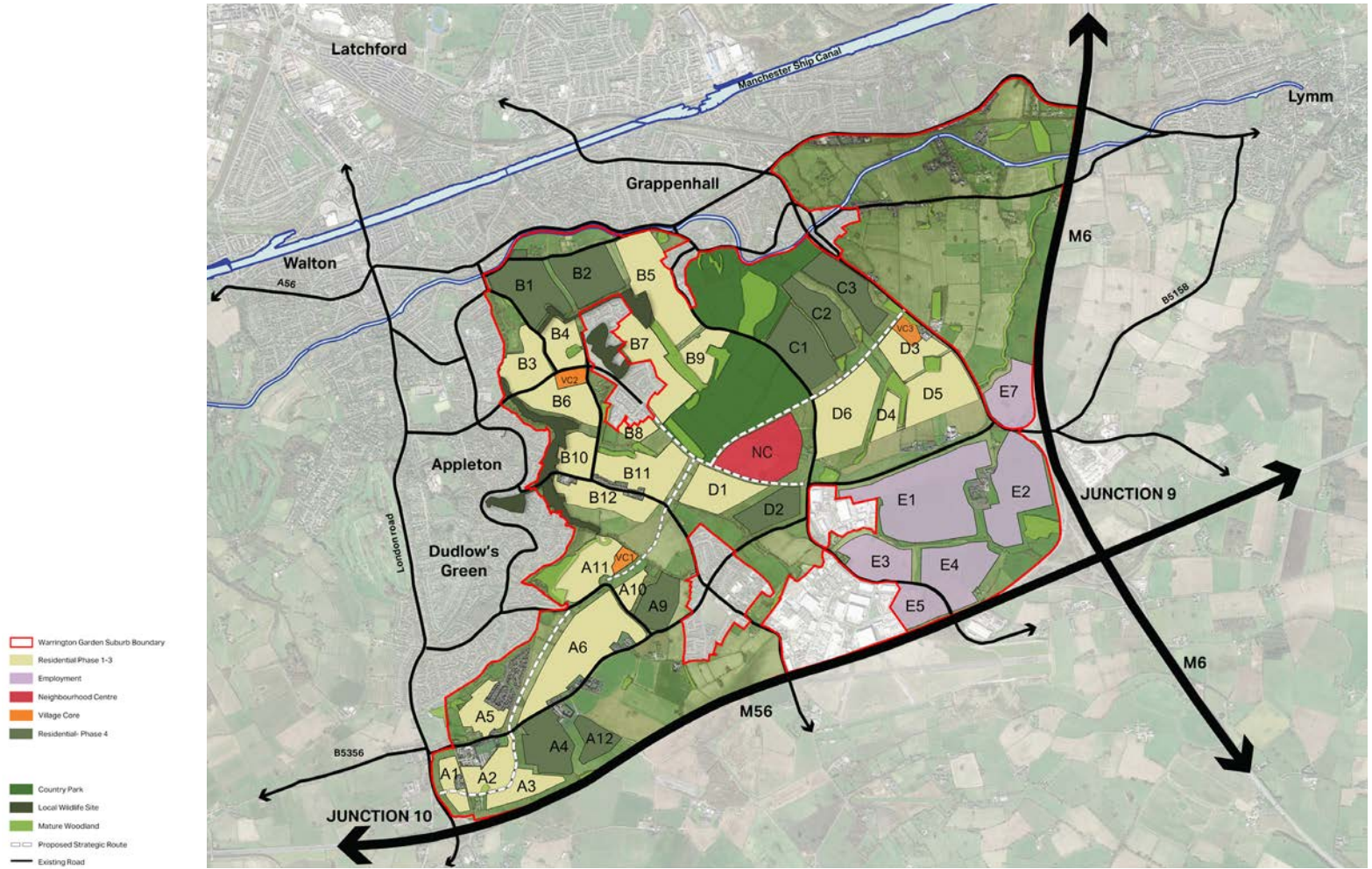


Fig 5.6: Land Use Framework

Density and Scale

Schedules and plans provided in this section of the report confirm development areas (in Hectares and Acres) and the potential number of residential units associated with individual development parcels. (See Figure 5.7).

At this stage of the design/development process relatively restrained gross development densities (20dph in lower to medium density areas and 30dph in higher density areas) have been adopted. These figures were derived through the developer engagement process and reflect discussions associated with technical matters that will need to be mitigated on site and will ultimately impact on net developable areas. The final development densities provided in individual parcels will consequently increase and are subject to more detailed design studies.

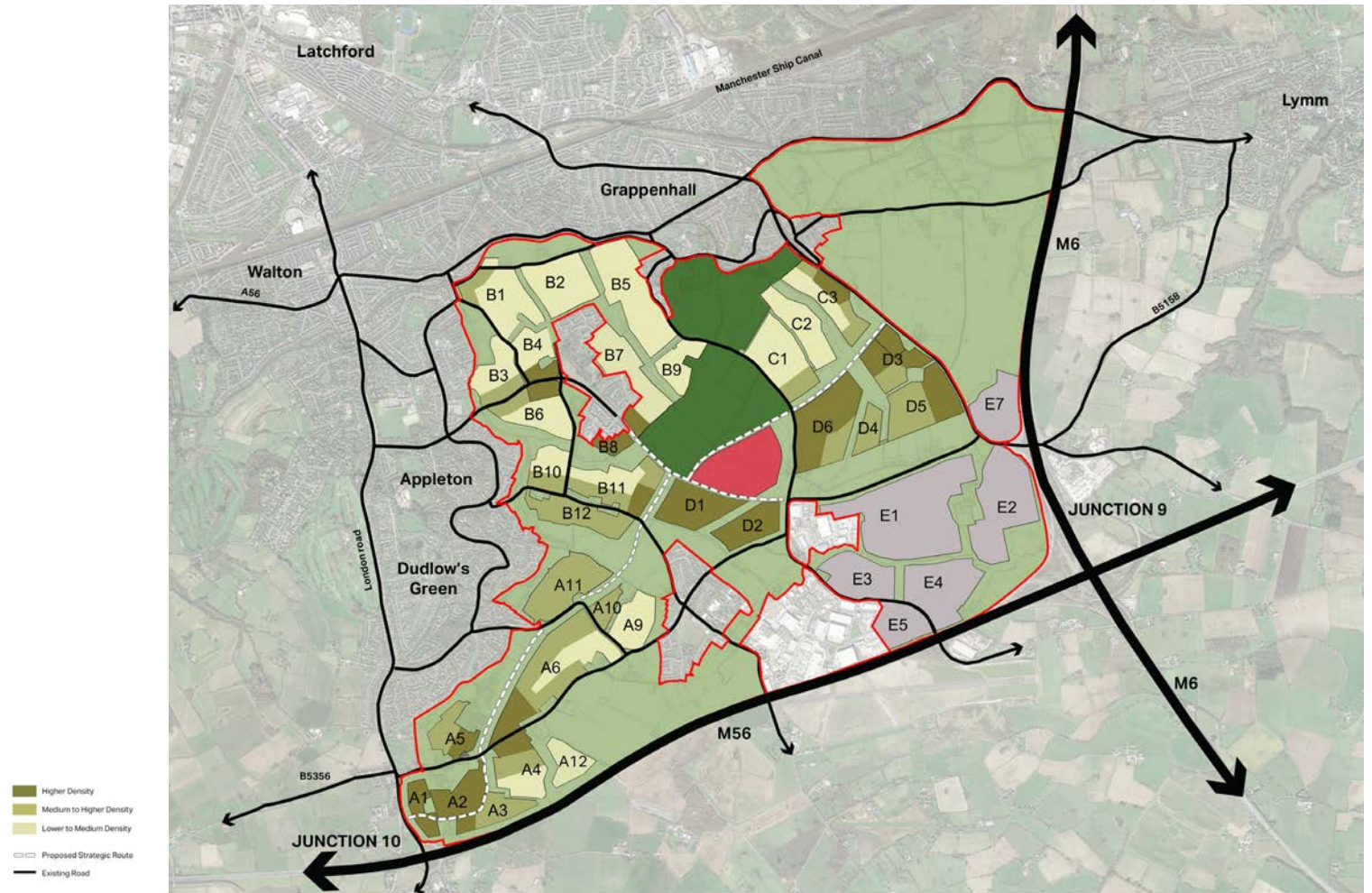
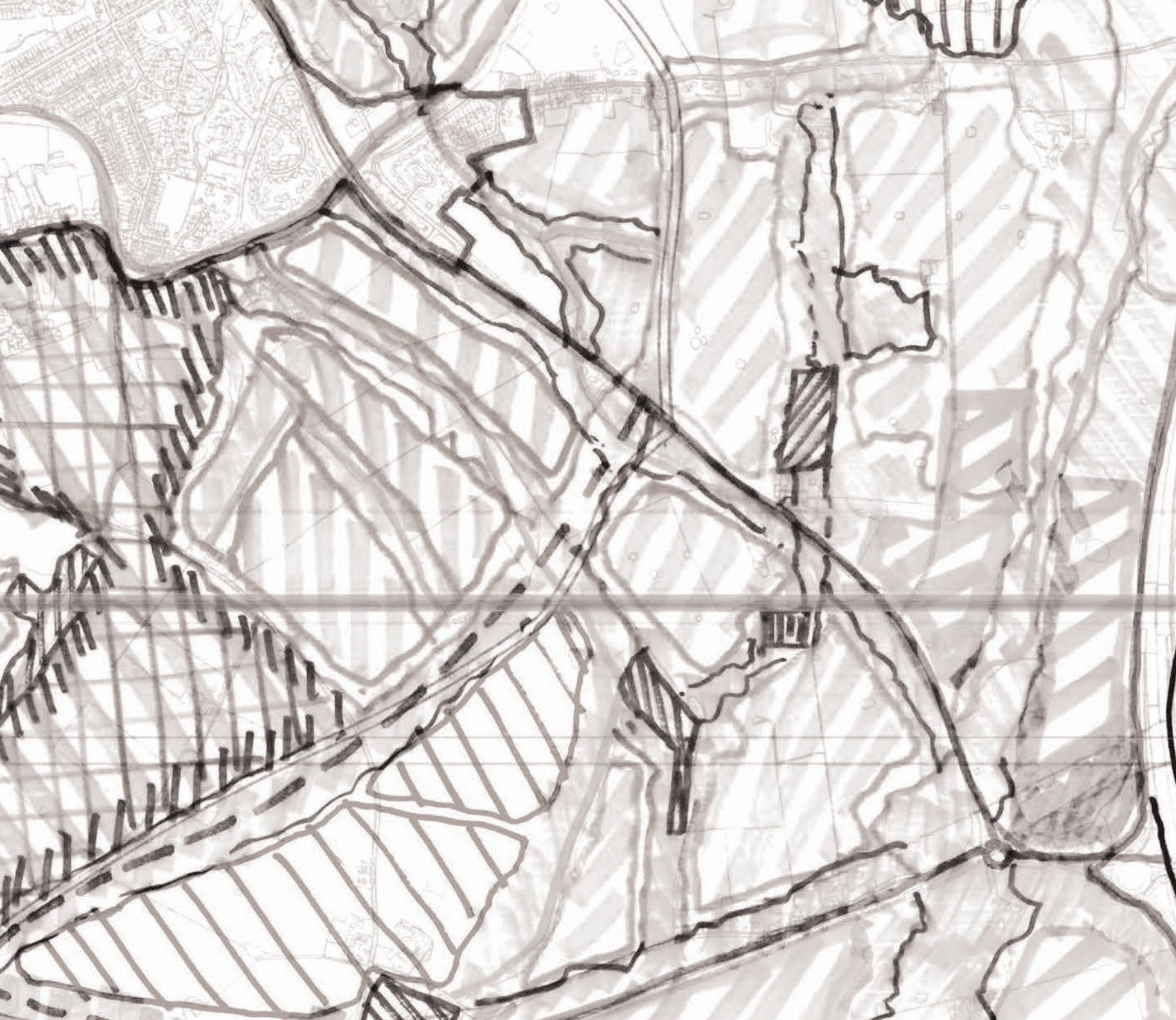


Fig 5.7: Density and Scale



Proposed Infrastructure

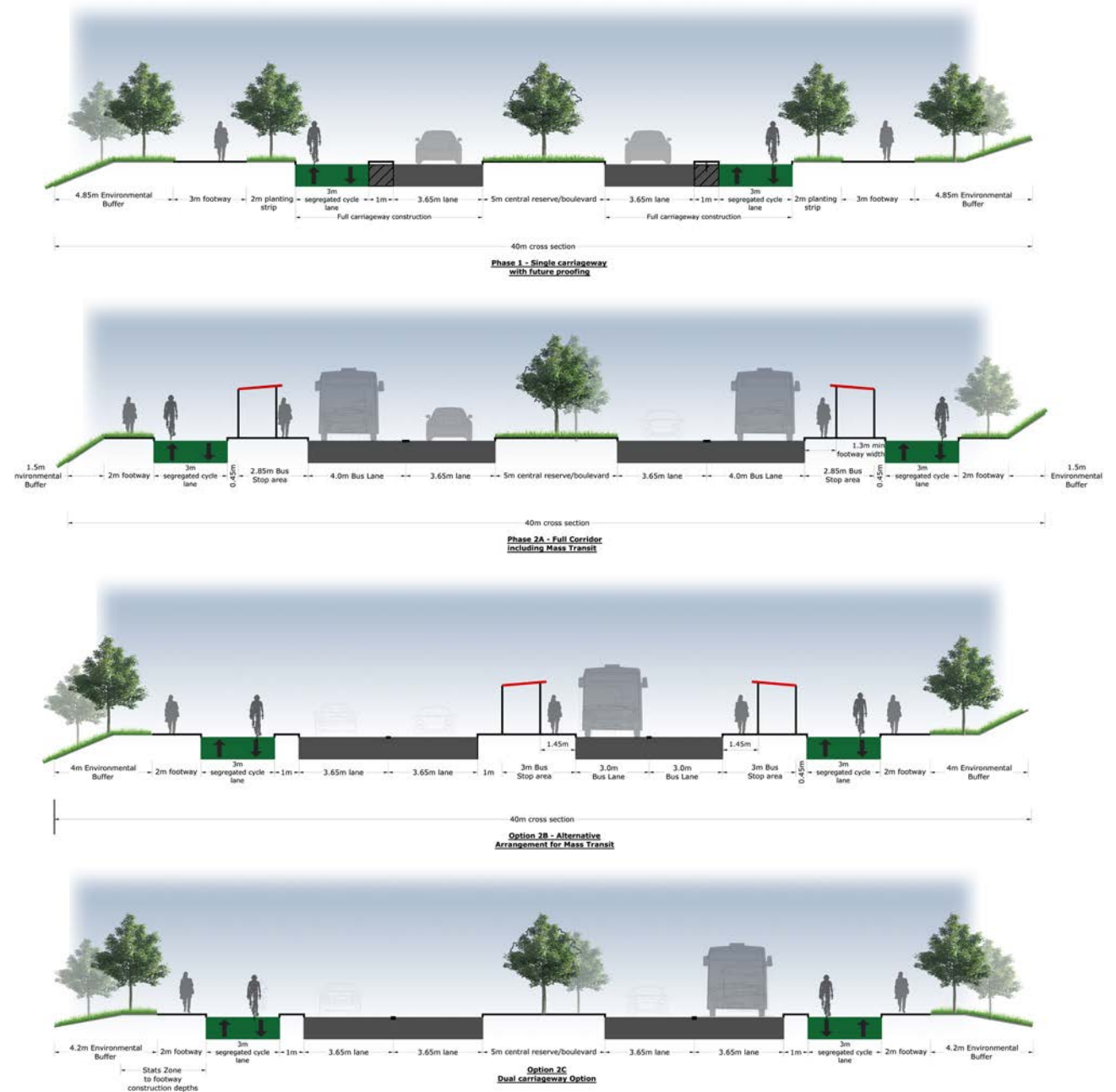
06

Strategic Movement Corridors Conceptual Arrangement

The overall movement network proposed for WGS has been generated through a series of workshops with the WBC (Transport for Warrington) Team. From the outset one of the primary determining factors has been to future proof a new network that has an ability to evolve as WGS matures and grows.

It is also important that the network has an ability to perform a multi-functional role. In the context of WGS the network has therefore been drawn as a series of 40 metre wide corridors that are consequently able to accommodate a range of functions including; vehicular lanes, cycle and footpaths, bus routes, green verges/landscape buffers in addition to primary utility corridors. The 40m width also generates a built in flexibility to the plans allowing roads and other elements to deviate within this zone in response to detailed design considerations such as retention of trees/habitat and to work with topographical constraints.

The diagram illustrated opposite (Figure 6.1) demonstrates how the movement corridor could evolve over time to react to these changes



NOTES

Cross Sections

Changes of cross sections from diagrams contained in the works brief.

Phase 1

- 1m temporary kerbed island/hatched area to be included between cycle lane and traffic lane.
- Full construction to be included within these areas to minimise the works required to be undertaken for future phases.
- 3.65m traffic lanes

Phase 2A

- Bus shelter offset 0.45m from cycle lane
- Bus shelter used - 1.55m width-1.8m with overhang
- Inclusive mobility states **minimum** dimension between bus shelter and edge of kerb is to be 1.3m
- Bus stop loading area to be 2.85m
- Bus lanes should be absolute minimum 3m - preferred minimum of 4m (TD 27/05 & Local Transport Note 1/97)
- 3.65m traffic lanes

Option 2B

- Bus shelter offset 0.45m from cycle lane
- Bus shelter used - 1.55m width -1.8m with overhang
- Bus stop loading area to be 3.03m in total
- Bus lanes should be absolute minimum 3m - preferred minimum of 4m (TD 27/05 & Local Transport Note 1/97)
- Guided bus way would require require an additional 700mm of land - worst case around bus stop location. Reduced width shelter required to keep land take to a minimum.

Lighting Columns

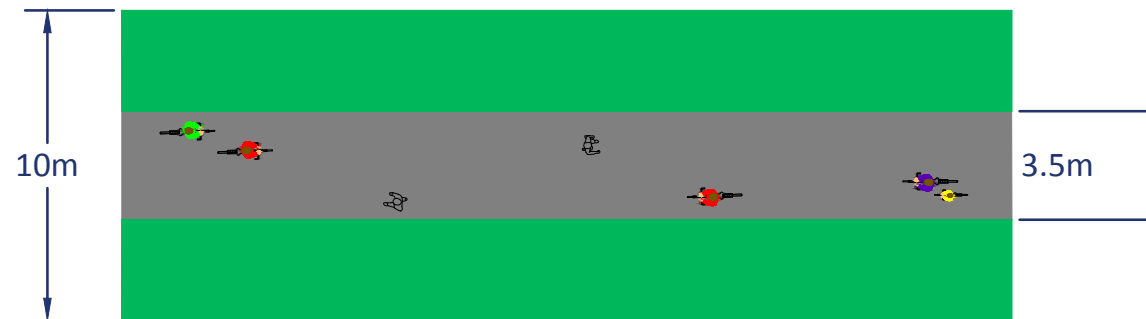
Lighting columns to be spaced at 35m centres staggered on either side of the carriageway - 12m high columns

Design Caveats

- Cross sections have not taken into account for vertical design and any superelevation of carriageway
- Cross sections have assumed a standard tie to the the extremities of the profile. Tie in details to be confirmed during any detailed design stages

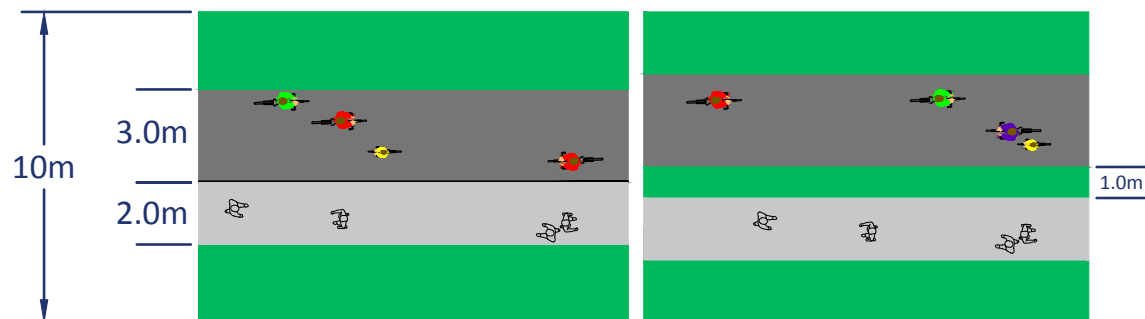
Greenway

A typical greenway corridor would be 10.0m in width. A default cross section will consist of a 3.5m minimum width hard surface cycle lane) flanked by grass verges. For busier greenways such as those closer to the Neighbourhood Centre or to a school, a segregated path would be required for cyclists and pedestrians (3.0m+2.0m) plus the grass verges.



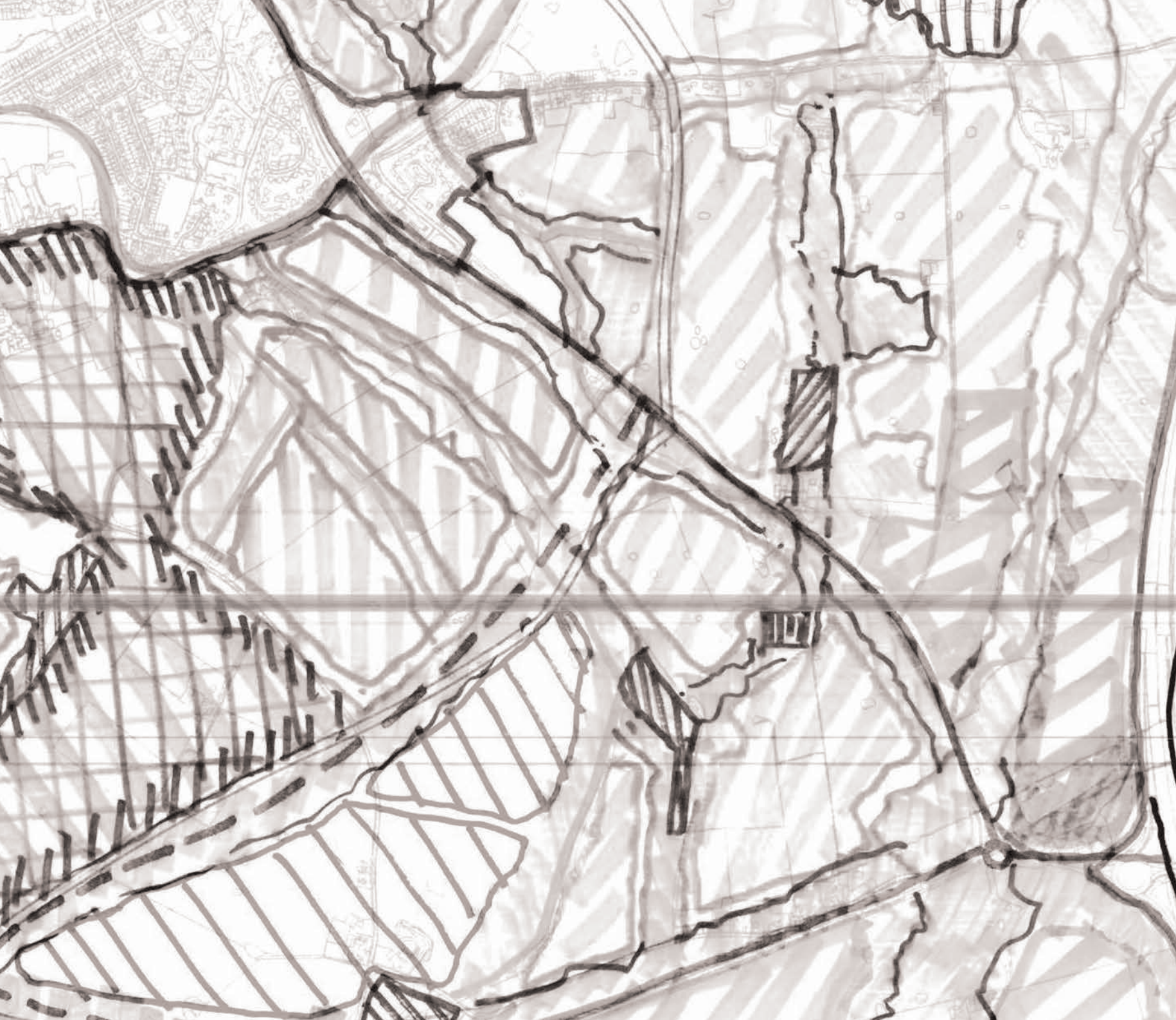
Layout 1 - Shared Use Path (3.5m +)

- Width should reflect the level and type of use forecast with a minimum of 3.5m width. On particularly heavily trafficked routes it should be increased to 4.0m



Layout 2 - Segregated Cycle Track/Footway (5.0m +)

- The width for pedestrians should reflect the level and type of use forecast with an absolute minimum of 2.0m, increasing where there is frequent use by groups.



Design Principles and Placemaking

07

Placemaking Principles

Key Character Areas

The fundamental approach that has been adopted when developing the character of individual framework components for WGS has been driven through creation of successful 'places' for people. Building layout and style, hard and soft landscape, highway design and use of materials should all work together within the development to create a cohesive overriding distinctive character. These elements must also take into account local context to ensure that the design will complement its surroundings.

In response a number of character areas have been defined within the overall framework approach, these areas are illustrated in the plan opposite. The character areas have been provided as a guidance tool, demonstrating how the overarching principles could be adopted through the design development of individual areas. The character areas also reflect on specific local context qualities that should be considered in the design of neighborhood areas, streetscape, landscape and buildings in order to create the desired sense of place.

Development Character Areas

The different approaches to character have been developed to highlight local contextual aesthetic and spatial arrangement through individual developments which will respond to the surrounding area, enhance legibility, and sense of place within different parts of the WGS. The character areas take their cue from their location within the scheme and consist of:

Key

-  Village A
-  Village B
-  Village C
-  Neighbourhood Centre
-  Employment Area
-  Country Park

The boundaries to the character areas should not be seen as hard and fast; sometimes it may be appropriate for them to blend into one another, or at other times the design may be enhanced by a distinct change of character.

The following section gives a brief summary of the character area distinguishing features; the guidance is not intended to be exhaustive or wholly prescriptive. It is intended to set out the character that is envisaged, and which should be taken forward as schemes are developed through individual outline planning applications and reserved matters stages.

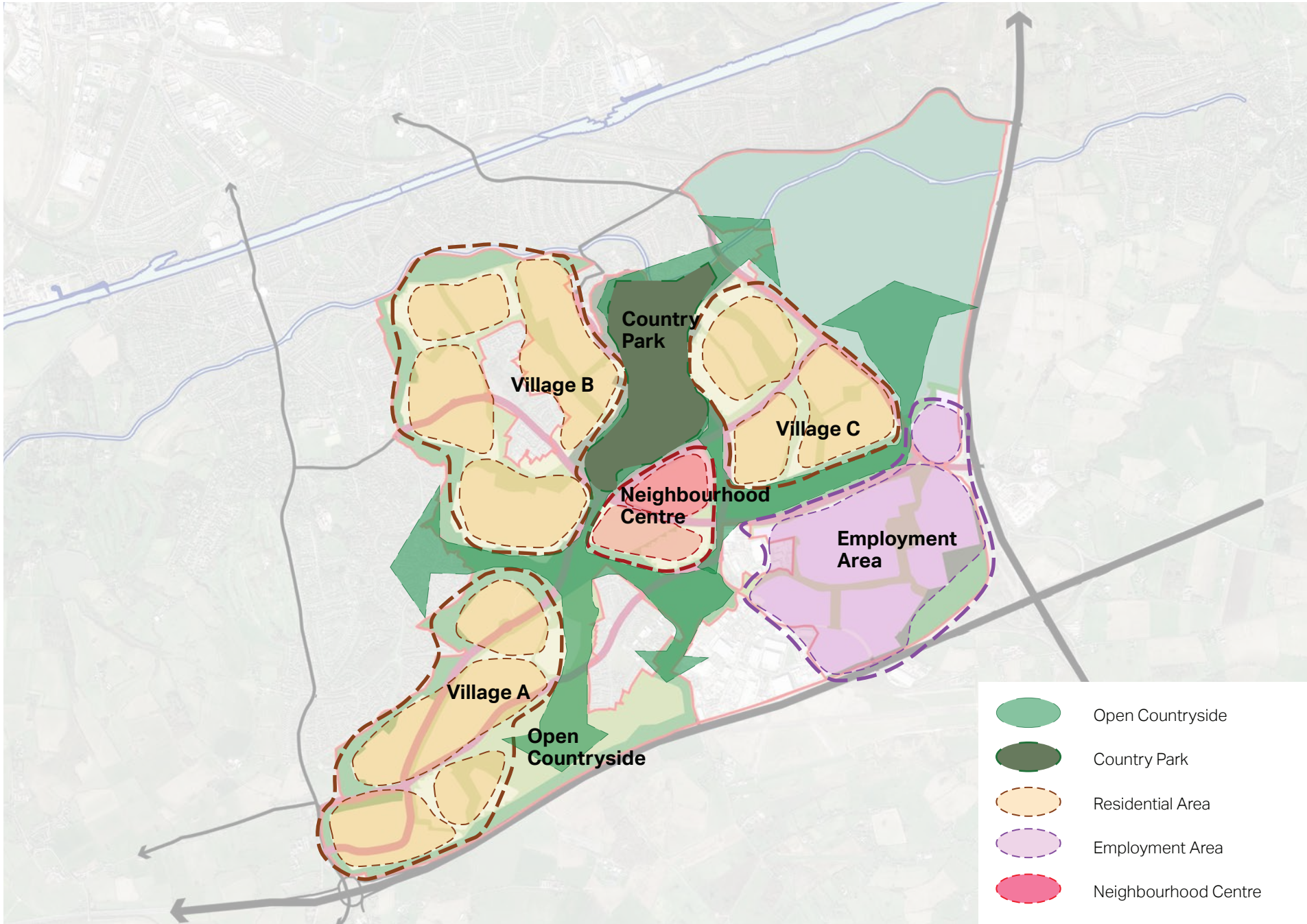


Fig 7.1: Concept Character Areas

Placemaking Principles

The following table identifies how individual principles should be adopted in different character areas. This has been provided in a format that confirms where principles are common or overlap with other areas and where the principles are distinct and unique to an area. In this way the framework provides a holistic approach with areas of continuity that will link the individual areas together as well as specific interventions that relate to the immediate context.

The narrative and diagrams that follow then provide confirmation of how these principles could be adopted.

		WGS Placemaking Principles	Principles Applied					
			Village A	Village B	Village C	Employment Area	Neighbourhood Centre	Country Park
General Principles		The physical and visual relationships between the existing communities and proposed development should be carefully considered and designed.	✓	✓	✓	✓	✓	✓
		New proposals should look to retain and enhance existing local landscape settings, townscape and historic features which contribute to the character of the area.	✓	✓	✓	✓	✓	✓
		Careful edge treatment along frontages adjoining existing communities and primary roads should be considered.	✓	✓	✓	✓	✓	✓
Specific Principles	Architectural character	Traditional contextual materials used in existing adjacent settlements should be considered or reflected in the design of new buildings.	✓	✓		✓	✓	✓
		The use of high quality, durable and aesthetically pleasing building materials is encouraged.	✓	✓	✓	✓	✓	
		Mixed residential typologies including linked properties, larger detached and semi-detached will create diversity of place that will aid orientation.	✓	✓	✓		✓	
		Greater use of large format cladding materials. More locally distinctive materials should be incorporated into smaller scale features.				✓		
		Key urban nodes areas, such as around the junction of Stretton Road and the proposed strategic corridors should be recognized through a change of scale up to four storeys materials and functions.	✓					
	Urban Form and Structure	A mix of formal and informal arranged urban blocks should be considered to increase diversity and reinforce the specific character differences in individual areas.	✓	✓	✓			
		More formal arranged streetscape should be considered to create a more defined urban character.				✓	✓	
Denser communities to be considered along primary movement corridors and key nodes.		✓	✓	✓		✓		

Table 7.1: Placemaking Principles

		WGS Placemaking Principles	Principles Applied					
			Village A	Village B	Village C	Employment Area	Neighbourhood Centre	Country Park
Specific Principles	Building Height	Higher buildings to be considered along primary movement corridors and key nodes.	√	√	√		√	
		Building height will be different from other residential areas, subject to further visual studies.				√	√	
	Movement and Connectivity	A 40-metre wide strategic movement and utilities corridor will run through the area to provide connections to WGS and the wider context.	√	√	√	√	√	
		Existing Public Rights of Way and cycle routes should be integrated with proposed movement corridors, to create a permeable network.	√	√	√	√		√
		Cycle routes and footpaths along adopted roads should be separated from general traffic routes wherever possible.	√	√	√	√	√	
	Visual Design and Legibility	Focal points/nodes, landmarks, and gateway features will be used to identify specific character points within individual development areas.	√	√	√	√	√	
		Building frontages along proposed strategic corridors will be carefully aligned to create visual containment and vistas. Landmark buildings will be used to define the end of the vistas;	√	√			√	
		Corner buildings at road junctions should be articulated through height and detailing and provide active interfaces on both sides, this is particularly important at development gateways.	√	√	√	√		
		Clear Way Finding measures should be considered at key locations.					√	√
	Public Realm and Landscape	A series of key public realm nodes should be considered at key locations, such as the key road junctions. Attractive functional public spaces should be created to recognise these areas as community meeting points.	√	√	√		√	√
		Proposed strategic green corridors will be designed with an urban character incorporating potential new SuDS/swales to connect to existing water courses.	√	√	√	√	√	
		Formally arranged tree planting should be adopted along the all primary roads and key urban nodes to create urban character areas.	√	√		√	√	
		Informal tree planting should be adopted where the rural landscape to be reinforced.	√	√	√			√

Village A Placemaking Principles

General Description

Village A follows a linear form both sides of Stretton Road between the A49 and Appleton Thorn. The boundaries of the village are defined by the M56 to the south, the proposed Neighbourhood Centre to the east, London Road to the west, and Dudlow's Green community to the north. Some commercial land uses are located to the western part of the village, close to London Road and the M56 Junction 10. The tower of the St Matthew's Church visually dominates the area and is visible from London Road. The Park Royal Hotel, a large L-shaped 19th century red brick 3-storey building, lies to the south of Stretton Road. These two landmark buildings provide a certain degree of architectural character for in the area. Most of the existing residential buildings are traditional detached or semi-detached properties, up to two storeys. The whole area shows a typical urban fringe landscape with rural character.

To reinforce and enhance the local identity within Village A, the relevant design principles shown in Table 7.1 should be adopted. Apart from these overarching principles, more specific principles should be considerations when formulating development proposals:

- The physical and visual relationships between Appleton Thorn, Dudlow's Green, Stretton, and the proposed communities should be carefully considered and designed;
- New proposals should look for retention and enhancement of existing local landscape settings and townscape or historic features which contribute to the character of the area; and
- Careful edge treatment along the M56 and Appleton Thorn village frontage should be considered.

Architectural Character

- The following principles are suggested to achieve high quality architectural design in Village A:
- Key urban nodes areas, such as around the junction of Stretton Road and the proposed strategic corridors should be recognized through a change of scale up to four storeys materials and functions; and
- Traditional materials used in Appleton Thorn, such as red brick, red sand stone and white render, are encouraged to be considered or reflected.

Urban Form and Structure

- Proposed building frontages along Stretton Road should be in line with the existing local properties: up to 2-storeys with gardens at the rear to maintain a rural character streetscape;
- The frontage along the proposed strategic corridor could be more formal, higher density incorporating more linear format blocks, which would be different from Stretton Road frontage; and
- Buildings up to three storeys will be acceptable to the western part of the village, as a response to the existing commercial use buildings around the junction of London Road and Stretton Road.



Existing typical local buildings



Existing buildings along Stretton Road



St Matthew's Church



Existing buildings in Appleton Thorn

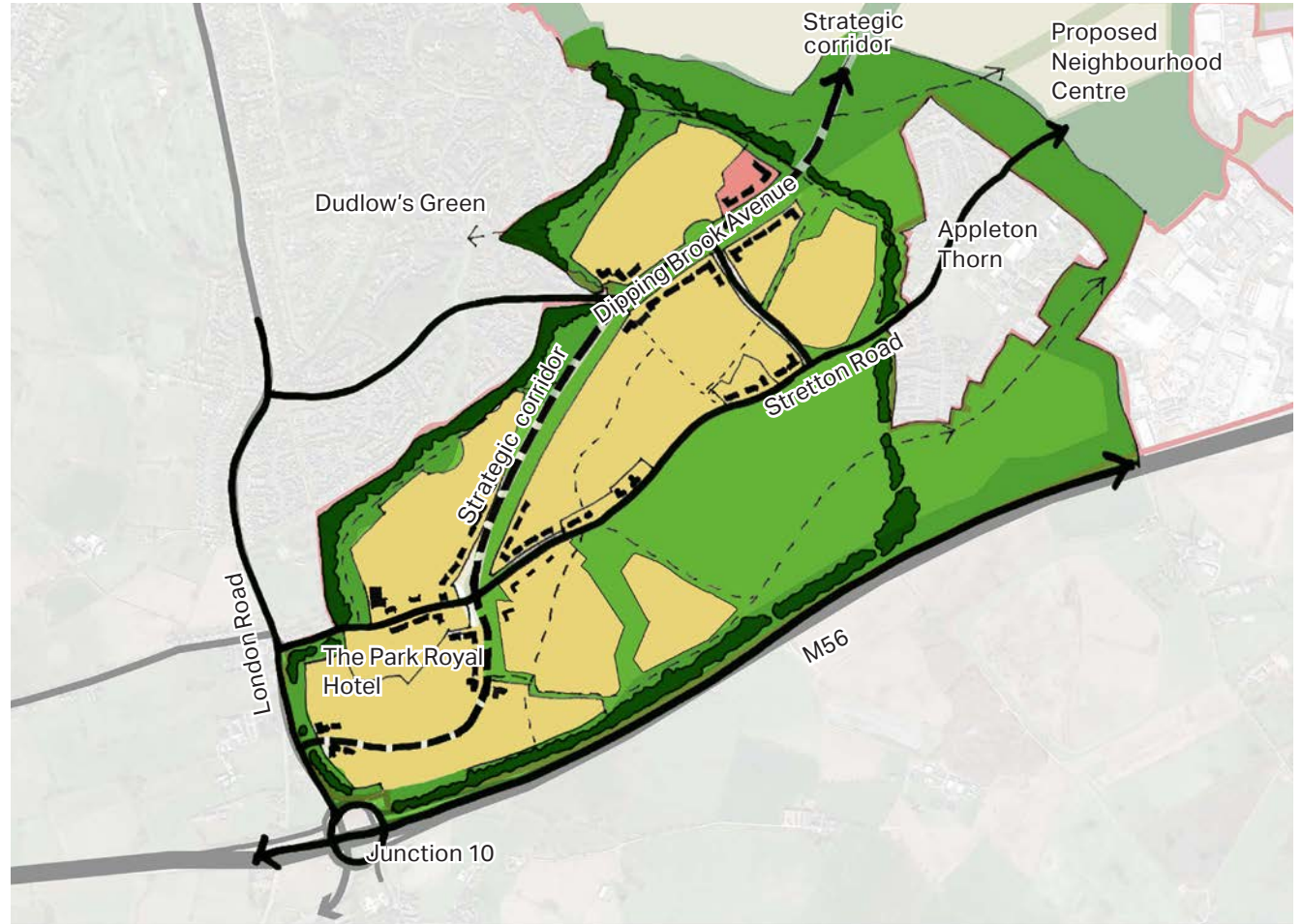


Fig 7.2: Village A Concept Masterplan

- Open countryside
- Tree/woodland
- Residential area
- Village Centre
- Existing road
- Proposed strategic corridor

Movement and Connectivity

- A strategic movement and utilities corridor to provide connections to Neighbourhood Centre and wider areas via London Road;
- The existing primary roads, such as Stretton Road, should be enhanced and incorporate green verges and footpaths. The verges should be planted informally with trees to maintain rural character; and

Visual Design and Legibility

- A landscape buffer between the Village A and Appleton Thorn should be created and act as a visual screen to separate the two communities.

Public Realm and Landscape

- A landscape buffer with dense woodland and potential acoustic fence is suggested along the M56 frontage to mitigate negative visual and noise impact from the motorway;
- Dipping Brook and mature woodland along Dudlow's Green edges should be respected and retained; and
- Proposed tree planting should be arranged formally along the proposed strategic corridor to create urban character, and informally as individual specimens and scattered groups along Stretton Road and the other minor roads to create countryside character.



Precedent images: buildings fronting green space



Precedent images: public realm







Precedent images: building details



Precedent images: buildings fronting green spaces



Fig 7.3: Village A Visual Design

-  Key view lines
-  Focal building
-  Gateway feature
-  Node space

Village B Placemaking Principles

General Description

Village B is bounded by wide open countryside buffer to the south, Dingle Brook and mature woodland to the east, Broad Lane to the west, and the Bridgewater Canal to the north. The majority of the area is currently in agricultural use; an existing residential community, Grappenhall Heys, lies in the middle of the village. This recent built up area consists of detached, semi-detached and linked properties which are up to 3.5 storeys. The whole area has a typical urban fringe character. Grappenhall Village Conservation Area lies to the east of the Village B and should be considered when formulating development proposals for Village B.

Table 7.1 provides overarching principles which should be adopted for future proposals in Village B. Considering the local context of Village B the following more specific principles should be considered:

- The physical and visual relationships between the proposed communities and Grappenhall Heys should be retained and enhanced; and
- Careful edge treatment along the Dingle Brook and Grappenhall Village Conservation Area frontages should be considered.

Architectural Character

- The architectural character of Village B provides an important opportunity to respond to and reinforce the scale, form, character and patterns of townscape of the Grappenhall Village Conservation Area; and
- Maintaining distinctive local identity along the proposed strategic corridor and Witherwin Avenue will be supported ;

Urban Form and Structure

- The proposed building frontages along Witherwin Avenue should be in line with the existing properties within Grappenhall Heys, i.e. up to 3.5-storey buildings to achieve an urban character streetscape; and
- Frontages along the proposed strategic corridor could be more formal and of a higher density in order to differentiate with to the Grappenhall Village Conservation Area edges. This will help to enhance the spatial experience throughout the village.

Figure 7.04: Village B Concept Masterplan



Existing view within Village B



Existing buildings in Grappenhall Heys



Existing buildings in Grappenhall Heys



Existing view of Witherwin Avenue

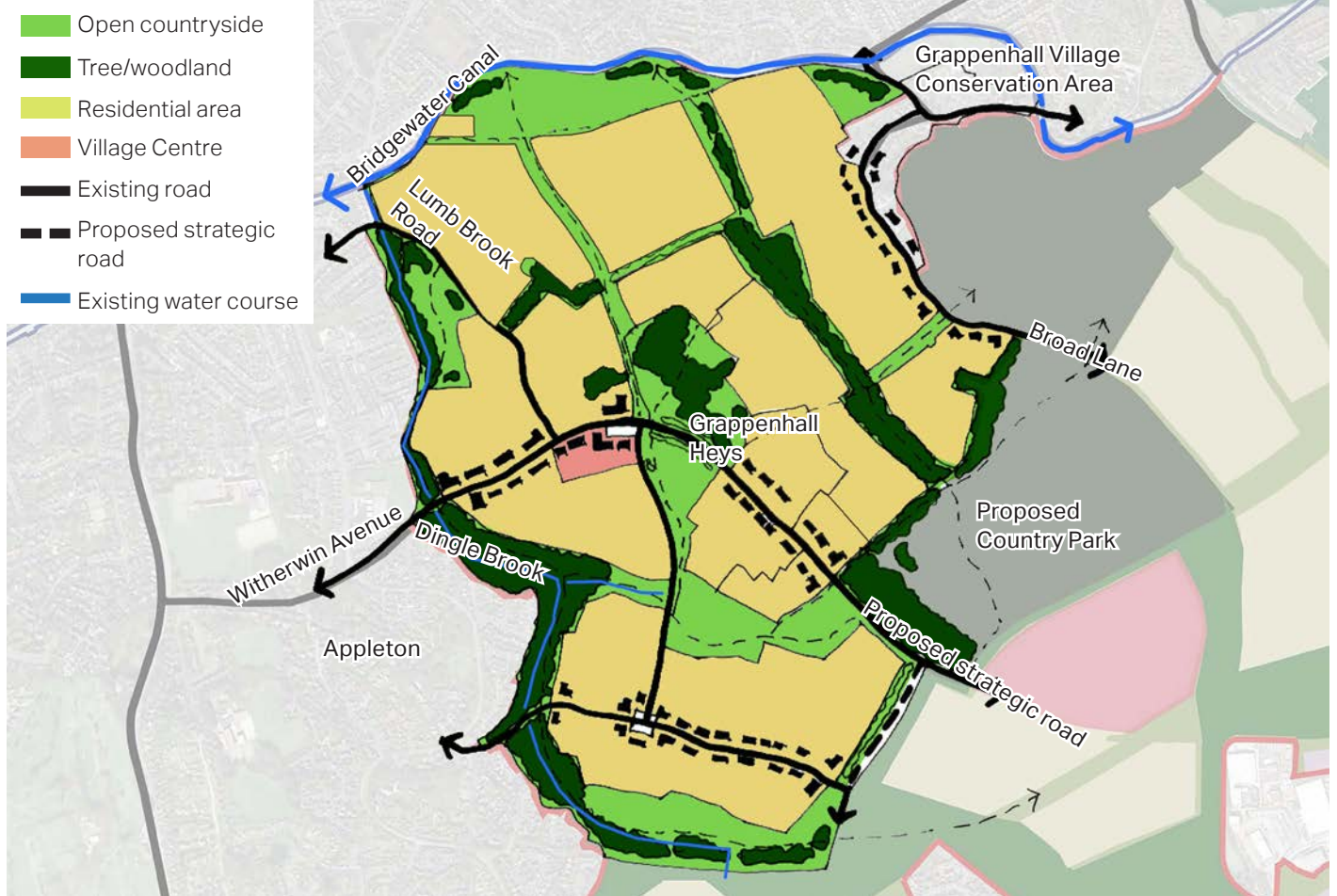


Figure 7.4: Village B Concept Masterplan

Movement and Connectivity

- The existing primary roads, such as Witherwin Avenue, should be enhanced and incorporate green verges and footpaths where possible. The verges should be planted formally with trees to match the existing road character; and
- A strategic movement and utilities corridor will join Witherwin Avenue and run through the village to provide connections to Neighbourhood Centre and Appleton;

Visual Design and Legibility

- The landscape buffer between the Village B, the Bridgewater Canal, and Appleton should be retained and act as a visual screen to separate different areas.

Public Realm and Landscape

- A series of key public realm nodes should be considered at key locations, particularly at the junctions of Witherwin Avenue and Lumb Brook Road;
- Dense woodland along Dingle Brook should be retained and enhanced to act as a landscape buffer to mitigate negative impact from the new developments; and
- Existing landscape character of the Grappenhall Village Conservation Area should be respected and retained.

Figure 7.05: Village B Visual Design



Precedent images: buildings fronting green spaces









Precedent images: buildings fronting green spaces



Figure 7.5: Village B Visual Design

-  Key view lines
-  Focal building
-  Gateway feature
-  Node space

Village C Placemaking Principles

General Description

Village C is bounded by Grappenhall Lane to the south, Broad Lane to the east, Knutsford Road to the west, and the Bridgewater Canal to the north. The majority of the area is currently in agricultural use but incorporating some isolated small scale development. Several well connected hedgerows and patches of mature woodland define the land pattern of the area. There is only one locally listed building presented along Cartridge Lane.

Table 7.1 sets out the overarching principles which the future proposals should follow to create attractive places. In order to reinforce local identity, more detailed design principles were suggested below to guide the future development proposals.

The following design principles should be considered when formulating development proposals:

- The setting of the locally listed building along Cartridge Lane should be retained;
- New proposals should look to retain and enhance the rural frontage along Knutsford Road; and
- Careful edge treatment and retention of existing field patterns should be considered.

Architectural Character

- Red brick, white render, and brown roof tiles are widely used within this area already and should be predominant in new architecture to maintain a sense of local identity.

Urban Form and Structure

- The proposed building frontages along Knutsford Road should be set back to respect to the nature of this busy movement corridor; and



Existing view of Cartridge Lane



Existing view of Knutsford Road



Existing view of Broad Lane

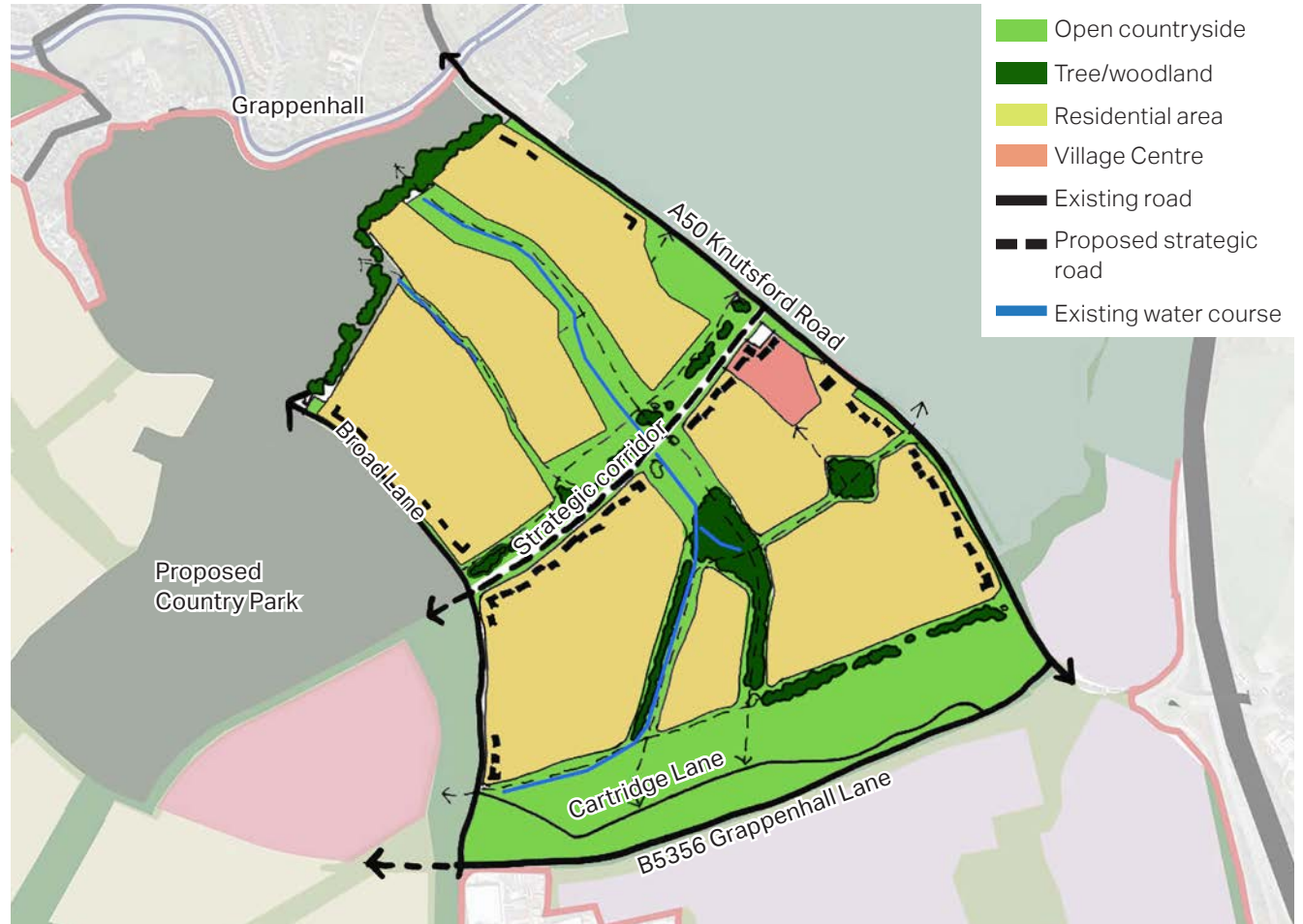


Figure 7.6: Village C Concept Masterplan

Movement and Connectivity

- A strategic movement and utilities corridor will run through the centre of Village C connecting Knutsford Road and Broad Lane;
- The existing primary roads, such as Knutsford Road, should be enhanced and incorporate green corridors and footpaths where possible. The verges should be planted informally with trees to maintain rural character;

Visual Design and Legibility

- A landscape buffer between the Neighbourhood Centre to the west and the Employment Area to the south should be created to act as a visual screen and to separate the villages.

Public Realm and Landscape

- A series of key public realm nodes should be considered at the village centre, and the junction of Broad Lane and the proposed strategic road;
- The mature woodland within the village should be kept and enhanced to act as a landscape and amenity hub to new residents; and
- Proposed tree planting arranged informally along the all types of roads and key urban nodes to create a rural landscape.



Precedent images: buildings styles



Precedent images: buildings fronting shared surfaces



Precedent images: cycle routes and green spaces



Figure 7.7: Village C Visual Design

- Key view lines
- Focal building
- Gateway feature
- Node space

Employment Area Placemaking Principles

General Description

The proposed Employment Area is bounded by the M56 to the south, the M6 to the east, Barleycastle Lane to the west, and the Grappenhall Lane to the north. Bradley Brook runs through the site and in an east/west direction and consequently creates two distinct parts. A large area of mature woodland lies to the east of the site and is visible from the motorways. Very few mature trees and hedgerows present within the remaining area creating an opportunity to larger scale plots. The Scheduled Ancient Monument, Bradley Hall moated site, lies at the centre of the employment area. This feature should be respected with associated stand off to reflect its historical significance.

The scale of the buildings in the proposed Employment Area will be larger than residential units. Therefore the placemaking principles for this area will be different from those applied to residential villages. Apart from some common design principles, as suggested in Table 7.1, the following specific design principles should be considered in order to create an attractive place to work,

Urban form and Structure:

- The orientation and location of the proposed buildings should be carefully considered to ensure a positive visual impact to primary connections; and
- The use of high quality, durable and aesthetically pleasing building materials is encouraged. It is recognised that this will be different to residential villages with greater use of large format cladding materials. However more locally distinctive materials such as red brick / stone should be incorporated into smaller scale features such as boundary walls.

Movement and connectivity

- Primary access to the northern parcels should be achieved from Grappenhall Lane. The southern parcels can be accessed via Barleycastle Lane; and
- Existing Public Rights of Way and pedestrian routes should be integrated with proposed cycle routes and footpaths, to create a permeable network throughout the village;

Public realm and landscape:

- The green corridor along Bradley Brook should be retained and enhanced to act as both an amenity and habitat resource;
- The mature woodland within the area should be kept and cooperated into a landscape buffer zone along motorways frontage; and
- Proposed tree planting could be arranged formally along proposed primary roads in order to 'soften' the edges of building plots.



Existing view of Grappenhall Lane



Existing view of green fields along motorway



Precedent images: building style



Figure 7.8: Employment Area Concept Masterplan

Country Park Placemaking Principles

General Description

WGS Country Park provides a once in a lifetime opportunity to create a diverse amenity to enhance the landscape for both existing and new residents. It has been deliberately located at the heart of the new settlement within easy walking and cycling distance for existing housing areas, new development and the proposed Neighbourhood Centre.

Wherever possible the existing landscape features and natural resources should be integrated into the future design; proposals for the Country Park should also consider how it would connect to wider areas.

The following principles have been suggested as the overall objectives for the Country Park evolve:

- Should be a safe and fun place to visit for all ages;
- Introduce different functions into the Country Park at appropriate areas and locations;
- Easy access for all users with different mobility levels; and
- Convenient linkages between the wider areas .

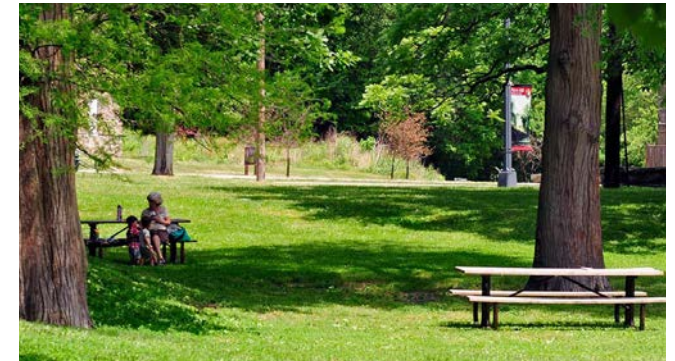


Existing views

Potential functions

The new Country Park has potential to provide some typical functions (as indicated on the plan opposite), that can evolve over time as time as the park matures in response to its surrounding.

- Potential to provide a new visitor centre, including activity areas for events;
- Provision of outdoor adventure play which utilises the existing mature woodland as a practical opportunity to diversify and create a site specific and unique experience attracting a range of age groups (such as tree top walks);
- Provision of outdoor sports pitches and facilities
- A potential Waterfront Green along the Bridgewater Canal that could highlight this important local historical feature and provide an attractive amenity destination for new residents; and
- Utilise and enhance the existing habitats for educational opportunities, including explanation boards in wetland areas and ecological parks.





Precedent images: activities



Figure 7.9: Country Park Concept Masterplan

Neighbourhood Centre Placemaking Principles

General Description

The Neighbourhood Centre will be located at the heart of the WGS. It will be easily accessed via several proposed and existing movement corridors, including foot and cycle connections. The proposed Country Park will be located to the north of the Neighbourhood Centre. Broad Lane, two proposed strategic corridors, and the Barley Castle Trading Estate define the other boundaries of the area.

To create an attractive Neighbourhood Centre, several design principles suggested in Table 7.1 should be applied. Considering the mix of land uses within this area, the following specific design principles should be considered when formulating development proposals:

Urban form

- The proposed building frontages adjacent to public spaces should be positive with active ground floor arrangements where possible; and
- Buildings up to four storeys will be acceptable for the mixed use buildings. Residential parcels within the Neighbourhood Centre could be higher density and up to 3 storeys.

Movement and connectivity

- Two strategic movement and utilities corridors will run alongside the Neighbourhood Centre and provide connections to the three new residential villages and the employment area;
- Existing roads, such as Broad Lane, should be enhanced and incorporate green verges where possible; and
- There is no existing Public Rights of Way within the area. However, a network of proposed cycle routes and footpaths will be created and integrated into a permeable network throughout the wider WGS.




Precedent images for the proposed Neighbourhood Centre



Precedent images for the proposed Neighbourhood Centre



Figure 7.10: Neighbourhood Centre Concept Masterplan

-  Key view lines
-  Focal building
-  Gateway feature
-  Node space

- Open countryside
- Tree/woodland
- Residential area
- Village Centre
- Employment area
- Neighbourhood Centre
- Existing road
- Proposed strategic road
- Existing water course

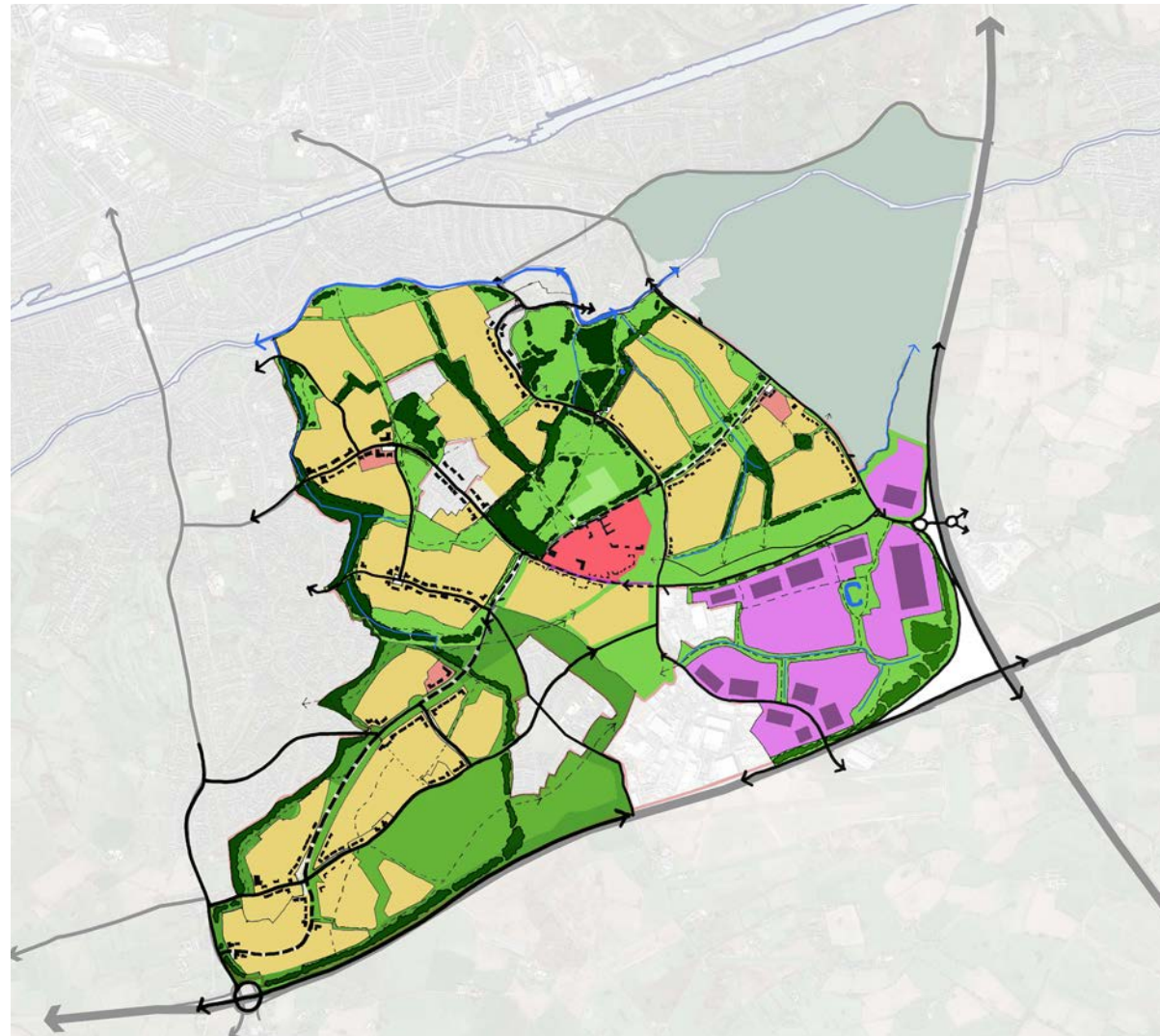


Figure 7.11: WGS Concept Masterplan

Conclusions and Next Steps

08

Phasing Strategy

The growth opportunities highlighted in the WGS Framework represent a significant level of change to the south-east of Warrington; inevitably the timing and delivery trajectory of development and associated infrastructure will be influenced by a number of factors. Unlocking change at the scale envisaged is complex, requiring a phased approach to aid viability and deliverability within and beyond the planning period. An appropriate phasing strategy will be not only about ensuring that the physical form of development remains faithful to overarching framework and placemaking principles, but is also about building in a mechanism for monitoring and managing the impact of development over time. Planning in advance for the provision of supporting infrastructure is a fundamental part of a placemaking ethos.

The potential delivery phases illustrated in Figures 7.1 to 7.5 have been generated through ongoing discussions with stakeholders in relation to housing trajectory, land availability, highways and utilities infrastructure capacity and market analysis. Each phase has been designed to be delivered in parallel with the necessary physical and social infrastructure, thereby maintaining the linkage to creating sustainable communities rather than simply developing. Three principal phases of development are identified within the Local Plan period and in a future Phase 4 beyond this defined stage. Within each phase it has been assumed that development can commence on multiple fronts that consequently impact on overall trajectory figures. The main components of each phase are described below:

Phase 1: incorporates three non-Green Belt sites within Villages A and B, and will deliver 930 housing units. These areas are ostensibly an extension of existing settlements and would be developed in parallel with the establishment of the Country Park as a recognised asset that can mature and evolve as the WGS community grows. Alongside the new homes approximately 116 ha of new employment land could be delivered close to the junction 9 of M56. Enabling infrastructure including new strategic movement and utilities corridors will also be required to provide the anticipated level of connectivity throughout the area;

Phase 2: new strategic movement and utilities corridors will create a more robust east/west linkage between the A49 and A50. These new routes converge at the area identified for the new Neighbourhood Centre; a new heart to WGS, potentially incorporating new schools (primary and secondary) shops, health and leisure facilities. Phase 2 could deliver the largest proportion of housing, over three of the four villages that will also encompass their own discrete village centres (local convenience facilities within easy walking/cycling distance) as appropriate;

Phase 3: by the end of phase 2 the fundamental WGS structure is in place, primary infrastructure/movement corridors have been created with new development extending the established villages through to hard boundaries as the new community matures. Phase 3 takes development through to the end of the plan period;

Phase 4: identifies development beyond the defined plan period through new areas of residential development along the new east/west corridor and along the WGS northern edge, adjacent to the Bridgewater Canal.

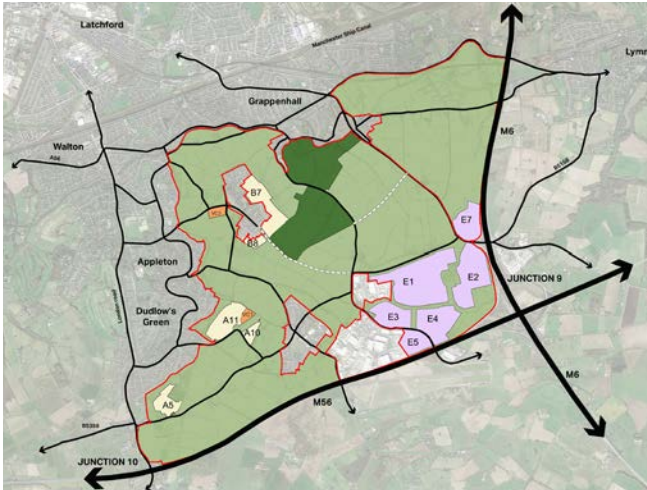


Figure 7.1: Phase 1

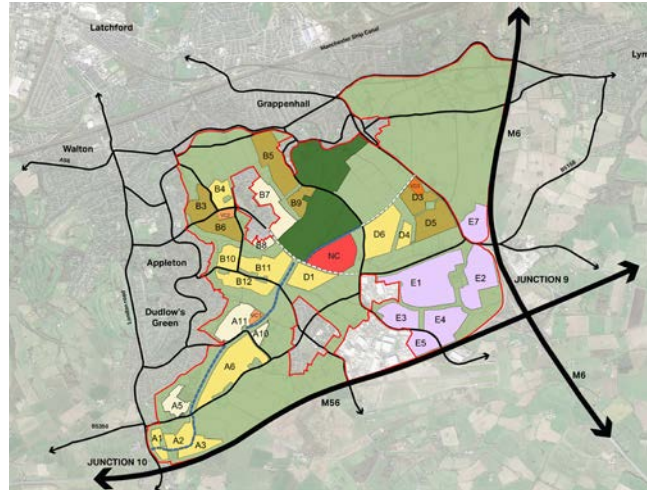


Figure 7.3: Phase 3

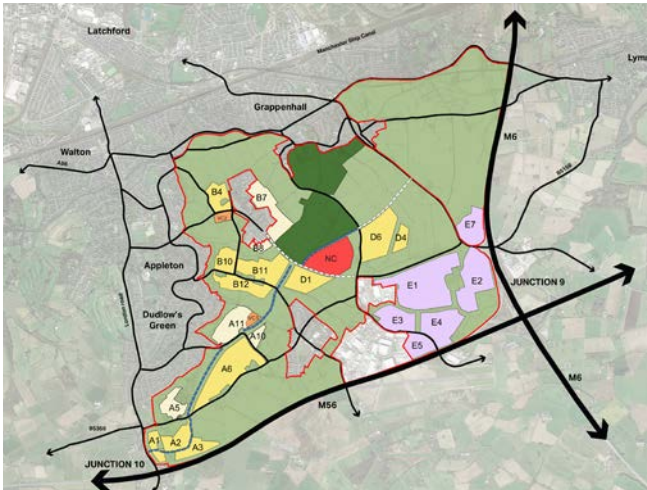


Figure 7.2: Phase 2

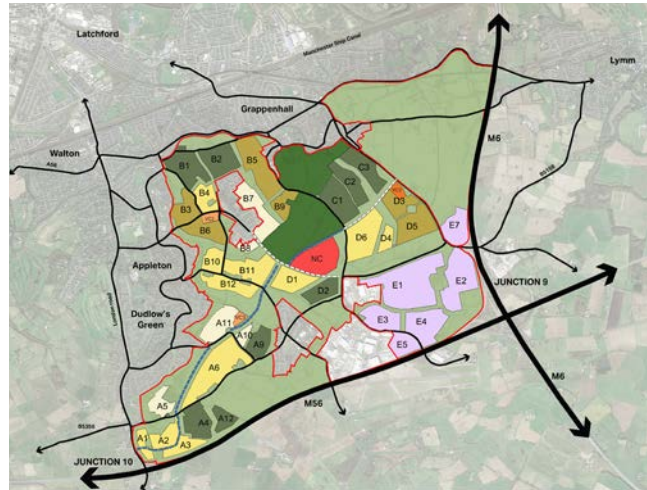
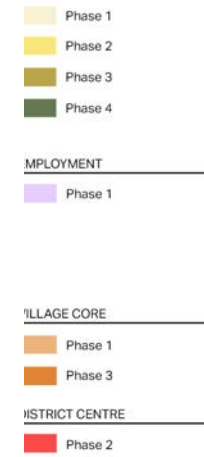


Figure 7.4: Phase 4



A full breakdown of development achieved in each of the phases described on the previous page is provided in the table opposite.

Warrington Garden Suburb Phasing Schedule

PHASE 1

Land Use	ha	acre	HE Land Confirmed Unit Numbers (Planning Apps)
Residential	42.3	104.5	930
Village Centre	4.4	10.9	
Employment	116	286.6	
Total	162.7	402.0	930

PHASE 2

Land Use	Gross Parcel Area (ha)	Gross Parcel Area (acre)	Potential Number of Units (Gross Density)
Residential	128.8	318.3	2,692
Neighbourhood Centre	19	46.9	105
Total	147.8	365.2	2,797

PHASE 3

Land Use	Gross Parcel Area (ha)	Gross Parcel Area (acre)	Potential Number of Units (Gross Density)
Residential	74.3	183.6	1,485
Village Centre	2.5	6.2	
Total	76.8	189.8	1,485

PHASE 4

Land Use	Gross Parcel Area (ha)	Gross Parcel Area (acre)	Potential Number of Units (Gross Density)
Residential	106	261.9	2,208
Total	106	261.9	2,208

4,282 potential units to be delivered EXCLUDING Homes England sites (Phases 1-3).

5,212 potential units to be delivered INCLUDING Homes England Sites (Phases 1 -3).

Potential Number Units INCLUDING Homes England Land: 7,420 (Phases 1-4)

Potential Number of Units EXCLUDING phase 1 Homes England Land: 6,490 (Phases 1-4)

4,201 units within 20 years planning period, 81 units to be delivered on the post plan period. (Phases 1-3 EXCLUDING Homes England Sites)

5,131 units within 20 years planning period, 81 units to be delivered on the post plan period. (Phases 1-3 INCLUDING Homes England sites)

Conclusion

The primary objective of WGS was to create a framework which can support the Local Plan process and in turn articulate the scale and quality of development that is likely to come forward within this area, the social and physical infrastructure required to support it and to provide a vehicle for consensus building and implementation.

The work undertaken as part of its preparation has acted as a platform to debate and agree the most appropriate delivery mechanisms and associated implementation timetable whilst at the same time generating a flexible structure that enables private sector partners to bring forward their individual development proposals in a co-ordinated manner. It is hoped that this will provide a mechanism to ensure all landowners and developers make a proportionate contribution to the strategic infrastructure required to deliver the full development potential of the site. Individual components that makeup WGS are summarised below:

- A major new urban extension of around 5,200 new homes (with a further 2,200 homes beyond the plan period) set out in three garden neighbourhoods surrounding a new neighbourhood centre with retail, health and leisure facilities and a new country park.
- Walking, cycling and public transport linkages will connect these neighbourhoods to local and neighbourhood centres, such as Stockton Heath, a new employment areas and to Warrington Town Centre.
- An extensive and attractive green network will bind the WGS development area together with links to the wider Warrington off-road network.
- A mix of housing will be provided, incorporating the potential for different densities and a range of typologies that maximise flexibility. All residential areas will be fully permeable to facilitate easy cycle and

pedestrian access and all new roads will include high standard cycling and pedestrian provision, through shared use or segregated facilities as appropriate. In addition, WGS will benefit from a new secondary school, up to four new primary schools and a major new Country Park,. All these facilities will be well located to incentivise safe, sustainable travel and include on-site facilities for secure cycle storage.

- WGS also incorporates a major new employment area as an extension of the successful Appleton Thorn / Barleycastle business sites at the strategically important intersection of the M6 and M56. This will provide some 10,000 jobs within easy walking and cycling distance of the new residential neighbourhoods. Given the major opportunity to create a sustainable pattern of work trips to this new employment area, it is essential that the housing mix includes a significant proportion of higher density or affordable housing, more typical of employees in warehouse/distribution employment uses.

The ambitions for the WGS are aligned to the overall vision for Warrington as a whole, as set out in the Preferred Development Option (PDO).

Next steps

Ultimately delivery of the scale of investment envisaged through WGS will be dependent on a series of challenges being addressed and a number of opportunities being realised. For WGS the challenges are well rehearsed and include:

- Ongoing collaboration – between the public sector, land owners/promoters and statutory authorities to arrive at solutions that are deliverable.
- Viability – managing land value expectations against more innovative ways to capture value.

- Maintaining momentum – through ongoing governance and securing funding to take the process beyond plan preparation to implementation.
- De-risking - by means of site specific due diligence work that can anticipate the trajectory of new development.
- Securing agreements – with statutory bodies such as Highways England.
- Local plan process – a successful outcome and consequential designation of land for development outside of greenbelt allocation.

The opportunities and potential long-term rewards associated with bringing forward a governance structure that is able to resolve these complexities can achieve the quality of environment that is defined through the high level framework and placemaking principles set out within this document. To supplement this material going forward it will be important to develop more detailed masterplans for each village. These individual 'village masterplans' will need to capture and reflect local context and respond with appropriate housing types, densities and layouts as well as defining the preferred development structures and spatial arrangement within each development blocks. This exercise will naturally lead to site specific Design Codes that will apply best urban design practice to each village and the development parcel, translating placemaking principles into a set of decodable and illustrated design rules and requirements which will instruct and guide the future physical development of WGS.

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