MAMHILAD

NEW VILLAGE

UPDATED
OUTLINE PLANNING APPLICATION
DESIGN & ACCESS STATEMENT

JULY, 2022

CONTENTS

1 Introduction 10
1.1 Purpose & Structure Of Document 12
1.2 Site Location 14
1.3 Site Description 18
2 Policy Context 20
2.1 Planning Policy Context 22
2.2 Transport Policy Context 26
2.3 Design Policy 28
3 Context Assessment 30
3.1 Introduction 32
4 Context: Sub Regional 34
4.1 Socio Economic 36
4.2 Movement and Connectivity 38
4.3 Landscape Character 40
4.4 Topography 44
4.5 Settlement Growth 46
4.6 Settlement character 48
5 Context: Local 56
5.1 Movement 58
5.2 Facilities and Services 60
5.3 Views Into the Site 62
6 Context: Site 70
6.1 History and Heritage 72
6.2 Archaeology 74
6.3 Access and Movement 76
6.4 Landscape 78
6.5 Ecology 82
6.6 Drainage 84
6.7 Geo-technical 86
6.8 Services and Utilities 88
7 Involvement 92
7.1 Public Consultation 94
7.2 Design Commission for Wales 100
8 Evaluation 106
8.1 Summary of Constraints & Opportunities 108
9 Design 112
9.1 Design Ethos 114
9.2 Design Concept 124
9.3 General Placemaking Principles 128
9.4 Site specific Design Principles 134
9.5 Parameter Plans 140
10 Illustrating the Principles 150
10.1 Illustrative Masterplan 152
10.2 The Big Masterplan Ideas 154
10.3 Landscape & Ecology Strategy 156
10.4 Access & Movement Strategy 166
10.5 Drainage & Water Management Strategy 180
10.6 Sustainability Strategy 182
10.7 Character Areas 188
11 Summary 208

DOCUMENT REVISION 2022, JULY

This document contains highlighted areas as shown adjacent . These refer to revised text and images used in the Resubmission in July, 2022.

Yellow Boxes

Content of yellow box has been changed

Revised Text

Revised text is shown in black text and highlighted yellow

VISION

Mamhilad will be an exciting contemporary new village set within an attractive landscaped setting with the retained Nylon Spinners Factory at its heart. It will harness the considerable local built and natural environmental resources to create a new highly sustainable community where people will wish to live, work and visit.

4 CONTEXT: SUB REGIONAL

2.1 SOCIO ECONOMIC

The Torfaen LDP, specifically identifies the challenges and key issues facing Torfaen County Borough and in particular, the northern area of the administrative area to which the Mamhilad site is located. Specifically Section 2.5 of the plan outlines that the principal issues facing the County Borough are that socially Torfaen has poor educational performance, a significant need for new housing and affordable housing in particular, high deprivation levels particularly in the Northern and Central Cwmbran areas, poor human health compared to the Welsh average and an increasingly ageing population with a low overall increase in the population of Torfaen forecast over the Plan Period.

The proposed development and substantial community investment will bring both direct and indirect social and economic benefits to the area. The development will not only positively contribute to the key challenges facing Torfaen but also accord with the LDP objectives for the delivery of a comprehensive development within the Mamhilad Strategic Action Area. Specifically, the proposed development will increase the choice of housing and opening up new access opportunities to recreational and community resources.

2.2 MOVEMENT AND CONNECTIVITY

The site is located 2km north-east from the centre of Pontypool and lies immediately adjacent to the A4042 which is a Welsh Government trunk road and is a major route heading north towards Abergavenny, and south towards Newport and the M4. This road is dual carriageway standard and subject to national speed limit.

The A472 connects with the A4042 1.5-3km south of the site at a six arm roundabout. The A472 provides access to Caerphilly as well as destinations within Torfaen including Pontypool itself which it passes through. Also connecting from the A4042 at a roundabout immediately south of the southern tip of the site is Usk Road which provides an alternative route into the centre of Pontypool.

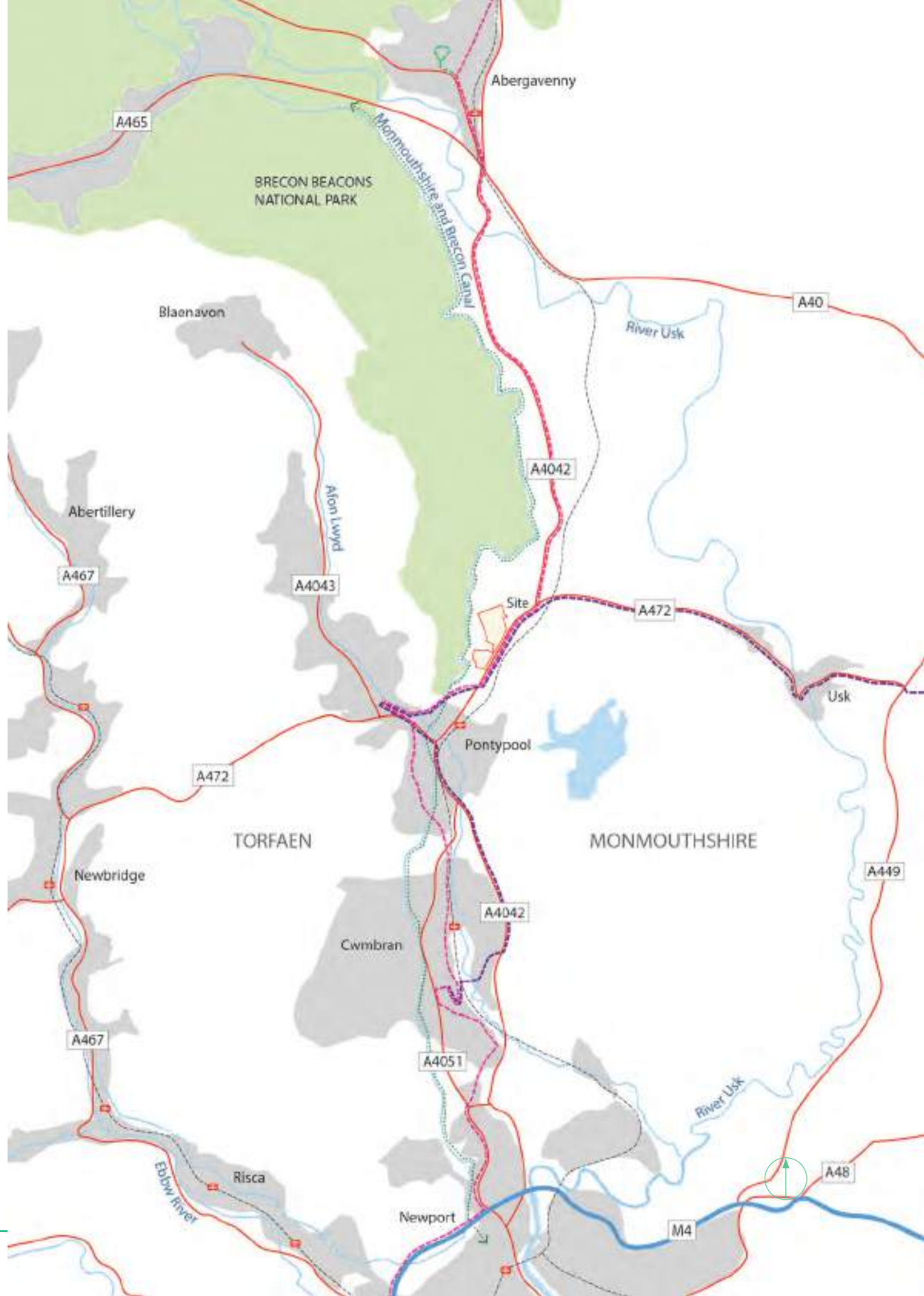
Usk Road provides access to New Inn and Pontypool & New Inn Railway Station which lies approximately 2km to the east of Pontypool centre and 1-2.5km to the south of the proposed development. The station lies on the Welsh Marches Line and is served by trains operated by Arriva Trains Wales. Destinations such as Hereford, Shrewsbury and Manchester can be accessed via direct trains heading north whilst Newport, Cardiff, Bridgend and Swansea can be accessed via direct trains heading south.

Long distance bus services operate along the A4042 passing the development site. The most frequent of these services is Stagecoach's X33 which operates between Abergavenny and Cardiff, via Pontypool and Cwmbran and the 63 service operated by Newport Bus which links Chepstow and Cwmbran via Usk and Pontypool.

National Cycle Network Route 49 follows the Monmouthshire and Brecon Canal to the west of the site. NCN Route 49 offers a hard surfaced and well maintained track south towards Pontypool, Cwmbran and Newport as well as north towards Abergavenny.

Footpath and cycleway along the Canal to the west of the site.

Right:
Wider Site Location Plan



2.5 SETTLEMENT GROWTH

An analysis of existing surrounding settlements is a useful exercise to help create a responsive development that is distinctive and responds sensitively to the surrounding context. This section begins with studies of sub regional settlement growth during the last two centuries. This is followed by an analysis of the character of three nearby settlements.

The site is located on the eastern edge of the South Wales Valleys at the interface with the open countryside of Monmouthshire. The four plans opposite show how the settlements in this area have expanded, the roads re-aligned and railways and canal extended in response to local economic changes.

The 1874 plan opposite shows a series of small settlements located along the Afon Lwyd valley. Sitting at the foot of the Brecon Beacons, it was an area of great natural beauty until the Industrial Revolution when the valley was exploited for coal and iron and, as a result, it changed considerably. The 1926 plan opposite shows a dramatic increase in development along the valley where the coal mines were located.

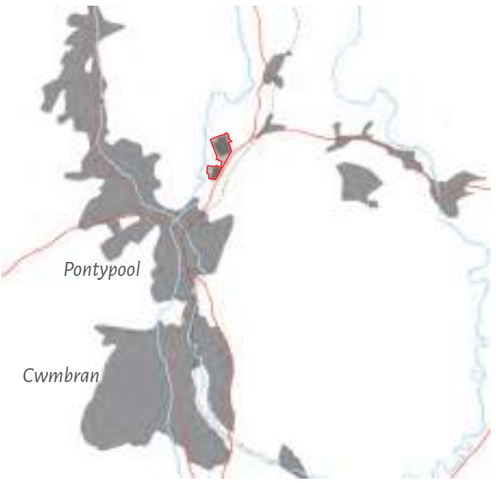
Economic hardship struck the coalfields after the First World War and continued through the 1926 general strike, the great depression of the 1930s, World War II and thereafter. The 1947 South Wales Outline Plan (SWOP), which included this area, looked at ways to improve the poor economic situation. The 1973 plan opposite shows two significant changes as a result of the SWOP, the new town of Cwmbran and the former Nylon Spinners Factory on the development site at Mamhilad.

The 2015 plan opposite shows continued expansion of the existing towns, evidence of how the valley's heavy industrial past has now been overprinted with urban regeneration, tourism and multi-national investment. The setting however, of the former Nylon Spinners Factory remains outside the edge of Pontypool. This factory is just one example of many large, underutilised factory units in the Valleys, which bear witness to the lack of success in replacing the older industries.

1874

1926

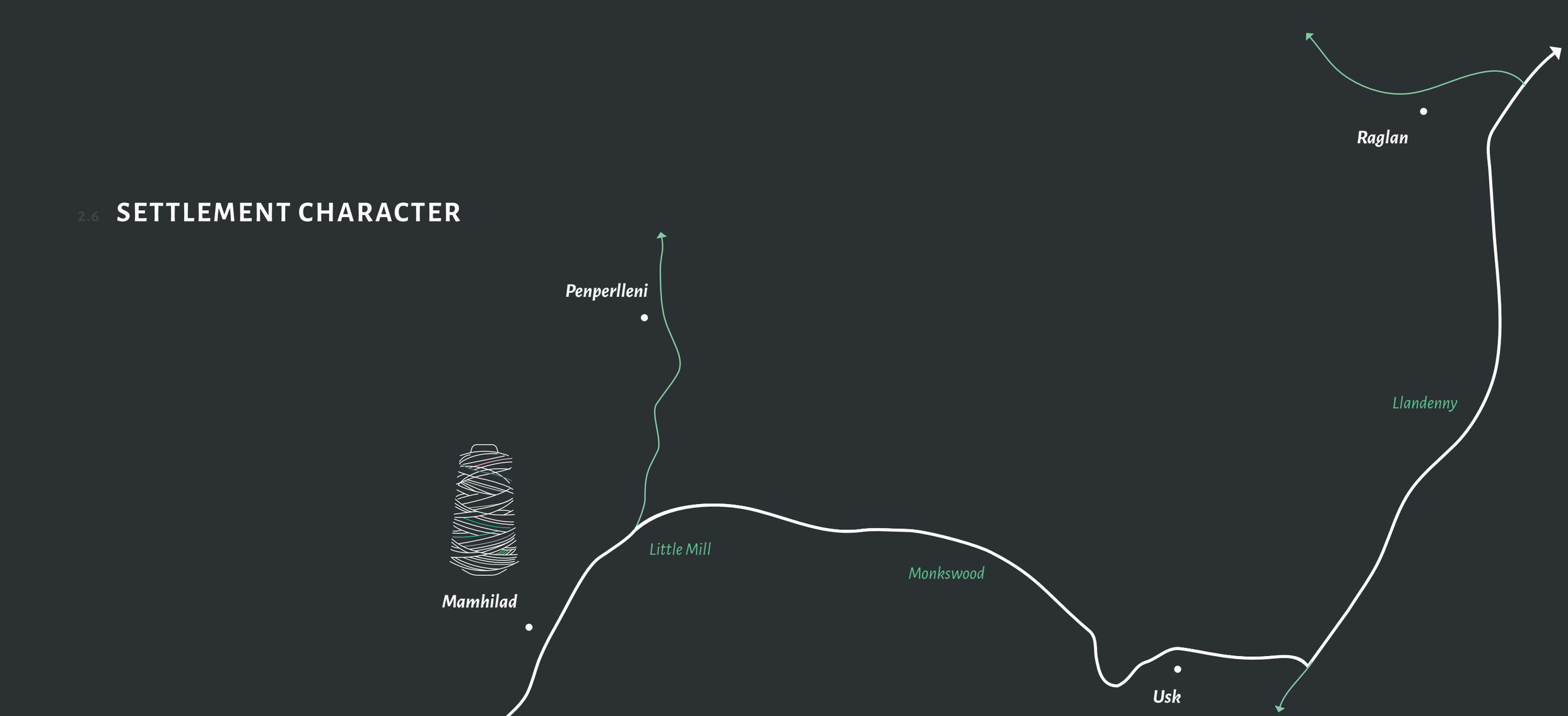
1973



2015

2.6

SETTLEMENT CHARACTER



It is important that the design proposals for Mamhilad respect the existing character of surrounding settlements. Three surrounding villages have been selected for study: Usk, Raglan and Penperlleni.

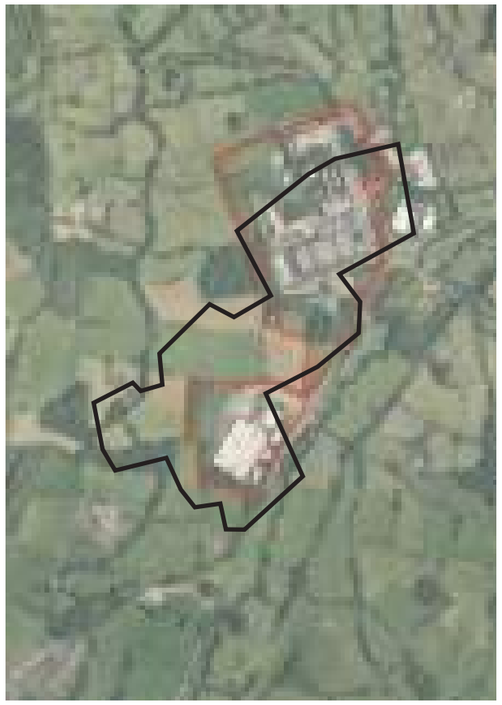
To help identify the character of each village four headings have been established: Land Uses, Open Spaces, Urban Form and Built Form. These headings aim to draw out elements such as uses, form, scale, massing and materiality and architectural details which will help to provide a number of positive contextual references for the proposed development at Mamhilad. It should be noted that the character analysis will influence, rather than dictate future design work.

The plan above shows how these three villages and the development site are part of a string of villages which lie to the north east of Pontypool. The settlements are greatly varied in origin, scale and character, influenced by their purpose and inextricably linked with the economic drivers of the nearby area.

The main conclusion drawn from these observations is the precedent for a new village at Mamhilad which could form another element of this group, to form a new destination point with its own identity.

USK

Usk is located on flat land next to the River Usk. It has a population of c 2,300.



The black line is the built outline of Usk overlaid on the site at Mamhilad

Relevant Characteristics

- The scale of the town and the mix of residential, local retail and employment opportunities;
- The location of uses distributed along the main route and the town square create a lively central focus;
- The sequential views along Bridge Street create a variety and intrigue;
- The linear green open space running along the riverbank and through the town is varied, vibrant and attractive;
- Higher density in the centre with 3.5 storey high terraced buildings and lower density at settlement edges creates a heart to the settlement and a positive relationship with the surrounding countryside;
- Building frontages are mostly in render and red brick with slate roofs.

Twyn Square, Usk

Red brick frontage on river walkway looking south

RAGLAN

Raglan is located midway between Abergavenny and Monmouth and has a population of c 2,000.

The black line is the built outline of Raglan overlaid on the site at Mamhilad

Relevant Characteristics

- The A40 removes through traffic from the village centre creating a pleasant environment in which to walk around the village;
- The scale of the village and the mix of residential, local retail and employment opportunities particularly located along the main route;
- The distribution of small open spaces along the high street lessens the dominance of traffic and provides an attractive street scene;
- Semi-detached and detached dwellings up to 2 storeys high;
- Materials are predominantly render, red brick or painted brick;
- Use of street tree and avenue planting.

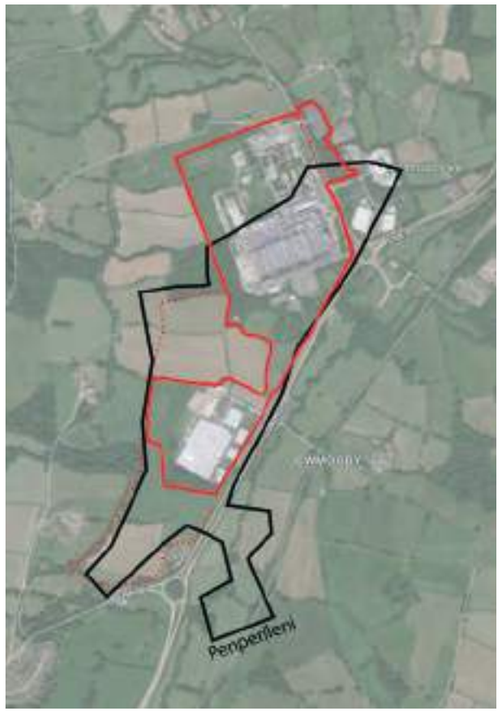
Red brick frontages along Castle Street

High Street Station Road, Raglan

Tree planting along Castle Street, Raglan

PENPERLLENI

Penperlleni is located midway between Pontypool and Abergavenny in the parish of Goytre. The village has a canal wharf on the nearby Monmouthshire and Brecon Canal.



The black line is the built outline of Penperlleni overlaid on the site at Mamhilad

Relevant Characteristics

- The activity around the canal wharf as a key driver of the local economy;
- The A4042 removes through traffic from the village centre creating a pleasant village heart;
- The urban form of the village which is located off the main road;
- The village green as a hub of community activity;
- The village is low density with buildings one or two storeys high;
- Deep front gardens with a variety of mature planting feature on all streets.

Edge of settlement frontage in mixed materials, Penperlleni

Dwellings intergrated within the landscape

Phoenix Cottage, a key building in painted brick

5 CONTEXT: LOCAL

3.1 MOVEMENT

There are currently two highway accesses to the development site that are in use. From the A4042 an existing left-in/left-out priority junction arrangement serves the former Parke Davis Site. From the Old Abergavenny Road is the main entrance to the Mamhilad Park Estate which is formed of a simple priority junction which is barrier controlled and has a gatehouse.

Old Abergavenny Road forms the north-eastern boundary of the site and connects with the A4042 at a roundabout adjacent to the north-eastern corner. Old Abergavenny Road is a lightly trafficked country road subject to national speed limit that provides access to the existing commercial destinations at Mamhilad Park Estate.

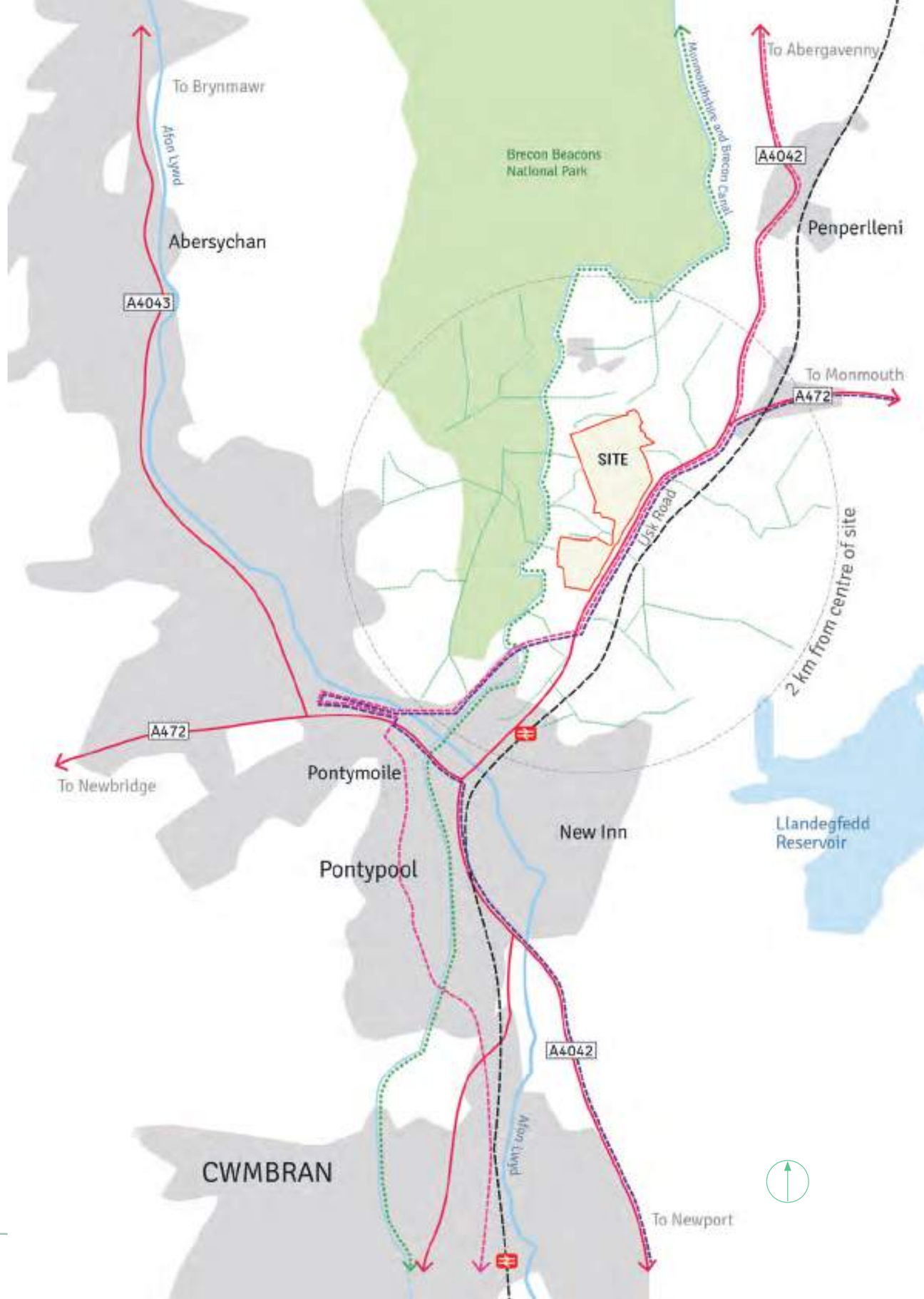
Footways are provided on each side of Old Abergavenny Road between the A4042 roundabout and the existing Mamhilad Park access. Heading north from here a footway is provided on the western side only. The A4042 has a footway northbound to Little Mill and southbound to the A4042/ Usk Road roundabout where it ties into the footway on the northern side of Usk Road. Usk Road provides footways on either side all the way into Pontypool whilst The Highway also provides footways on either side all the way into New Inn, via Pontypool & New Inn station.

The path beside the Monmouthshire and Brecon Canal which accommodates NCN Route 49, is also a Public Right of Way (PRoW) and can be used by pedestrians to access Pontypool southbound and Abergavenny northbound. There are also number of other PRoWs in the vicinity of the site.

The site is served by several bus routes which each pass the site on the A4042 and Usk Road. There are two pairs of bus stops on the A4042 in the vicinity of the site, these being the Cwmoody House/Cwmoody Cottage stops near the junction with Pen-Y-Lan Lane, and the Waun-y-Clare Inn stops either side of the Old Abergavenny Road roundabout.

Right:
Plan showing existing movement routes of the wider context of the Site

National Cycle Route 49 along the Monmouthshire and Brecon Canal



3.2 FACILITIES AND SERVICES

The site will be developed to incorporate a neighbourhood centre including local retail, a primary school and open space and community facilities.

Near the site are a wide range of facilities and services available in Pontypool. The plan opposite shows a 2km isochrone (a 20 to 25 minute walk for a typical able bodied person) from within the site, superimposed on a plan of local facilities.

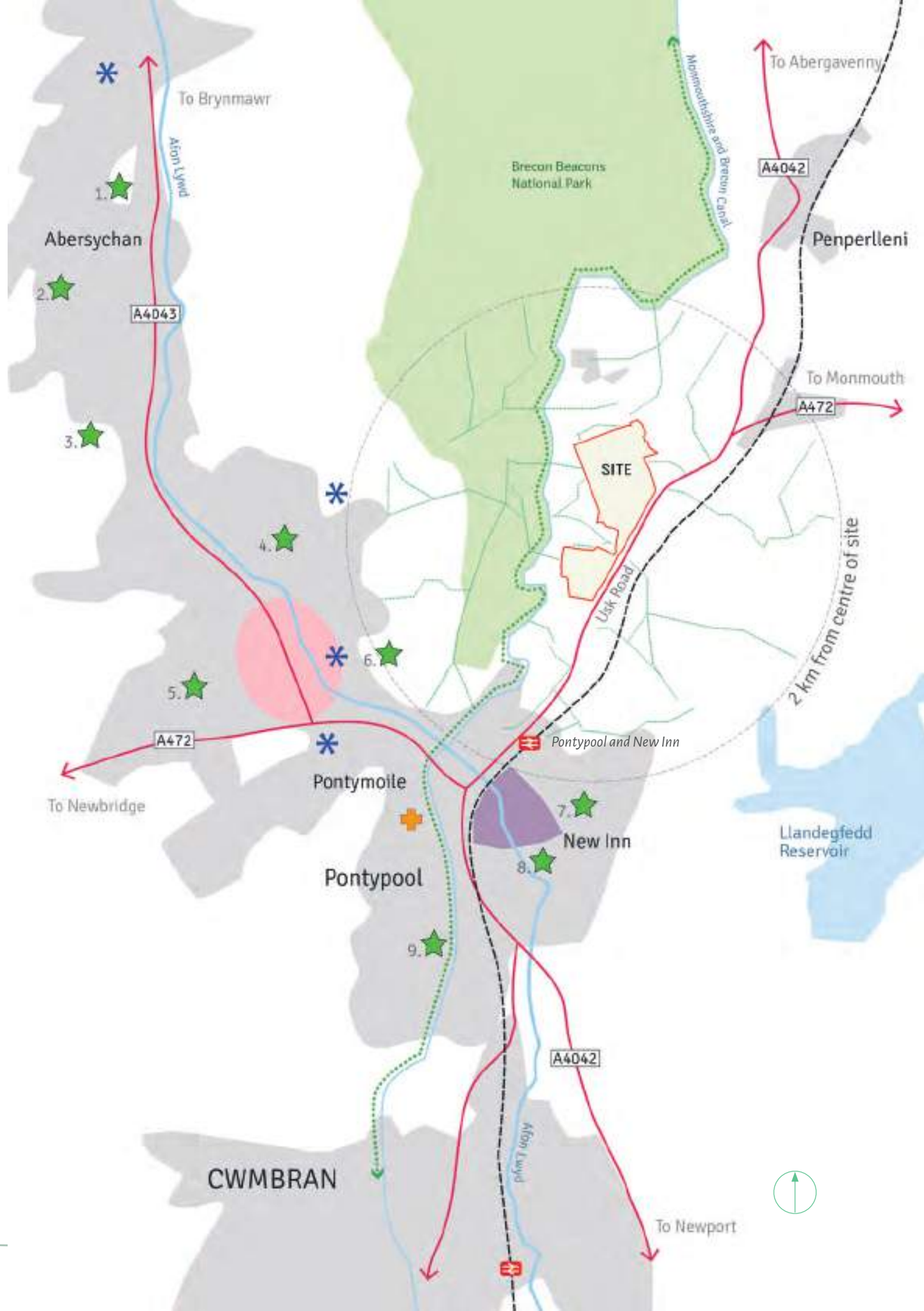
There are four secondary schools in the town, West Monmouth School and St Alban's RC School are the nearest to the site. The hospital is centrally located. There are several sports facilities including football, rugby and cricket pitches and a golf course.

Pontypool dry ski slope is a notable leisure facility

Sports Facilities
(shown on map opposite)

1. *4x tennis courts, 1x rugby pitch, 1x athletics track, 1x football pitch*
2. *1x cricket pitch*
3. *1x cricket pitch*
4. *1x football pitch*
5. *1x football pitch*
6. *1x rugby pitch, swimming pool & dry ski slope.*
7. *1x football pitch*
8. *2x rugby pitch, 2x football pitch*
9. *1x cricket pitch, 1x football pitch, 1x athletics track, 1x bowling green*

Right:
Plan showing proximity of local services and amenities



3.3 VIEWS INTO THE SITE

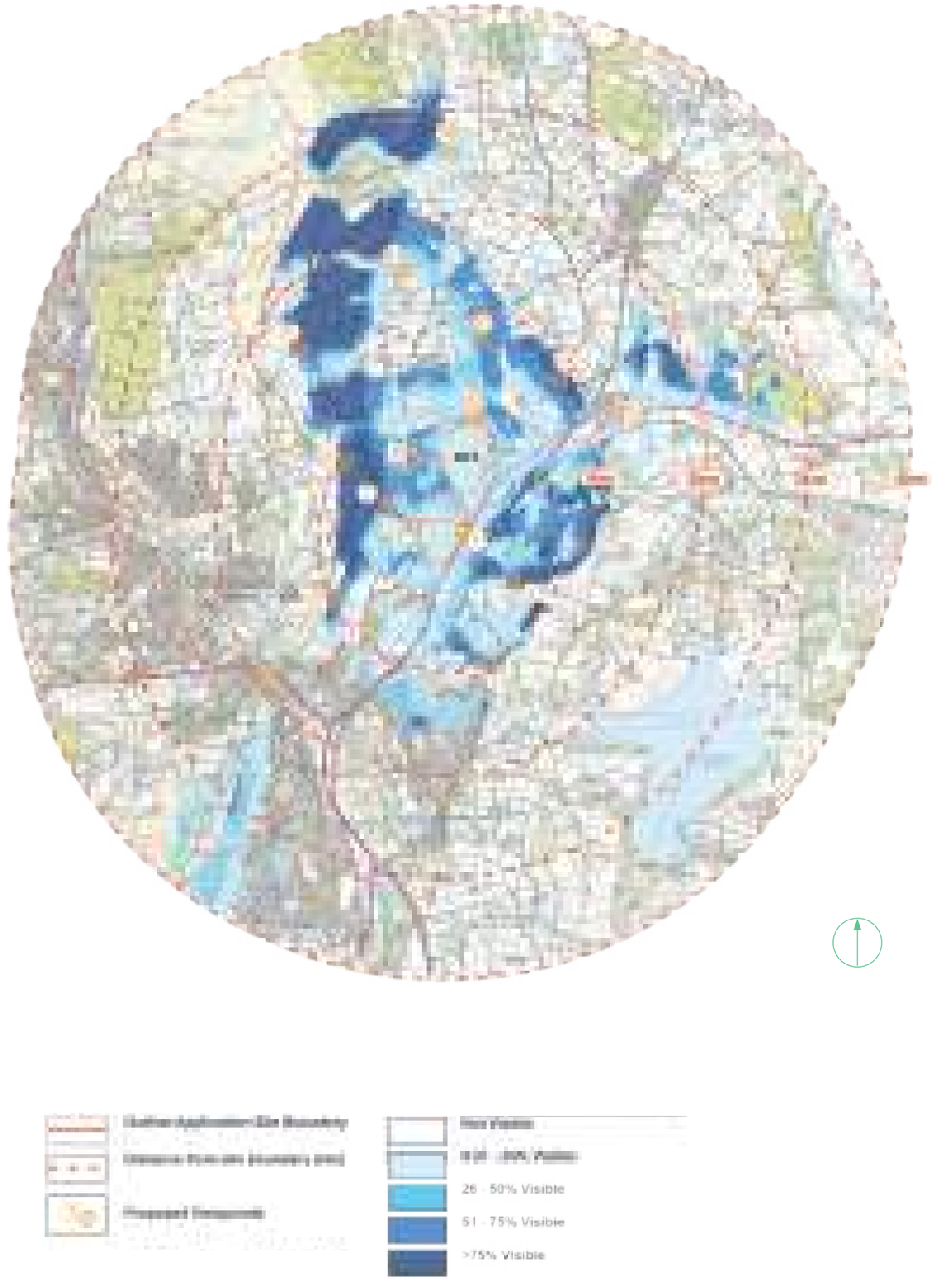
Topography greatly contains visibility from extending far within the wider landscape. Views of the Site largely relate to footpaths, residential receptors and open access users on elevated areas of sloping land and from the escarpment tops, within the National Park to the west and north west; footpath users and residential receptors on sloping elevated land to the east; as well as close proximity views along the A4042 and Old Abergavenny Road to the east, and any footpath users of residential receptors in this vicinity. Views to the south are largely restricted by substantial vegetation and built form within Pontypool. Views from the north are largely restricted by substantial vegetation along field boundaries, water courses and roads.

The assessment of the visual effects demonstrates that views of the proposed development will be obtained from a limited number of locations within the landscape surrounding the Site. However, bearing in mind the scale of the proposed development, as well as a change of use of existing buildings for employment and community and social facilities, the total number of visual receptors at properties and users of Public Rights of Way is limited. Other recreation features and roads that will be adversely affected to a significant degree.

It is also of note that those areas that would be most affected by the proposed development are currently located to the east and west, along more elevated areas of land, including a number of residential receptors and local footpaths. The greatest effects on users of local footpaths would occur along those which either pass through the Site, along the Site boundary or close to the Site. Landscape proposals, such as substantial structural planting and design of the development will significantly reduce the effect on receptors, in particular those in close proximity. Where visible, the proposed development would be seen within the context of existing built development across the Site, where large scale industrial buildings already characterise views and have long been established within this part of the landscape.

The LVIA concludes that, from a landscape and visual perspective, the proposed development responds sympathetically to the surrounding context, it retains substantial vegetated boundaries and much of the important vegetation structure within the Site, and is sympathetic to the character of the wider landscape. The proposed layout has been designed to minimise visual effects, provide a strong green infrastructure, new recreational linkages and accessible open space.

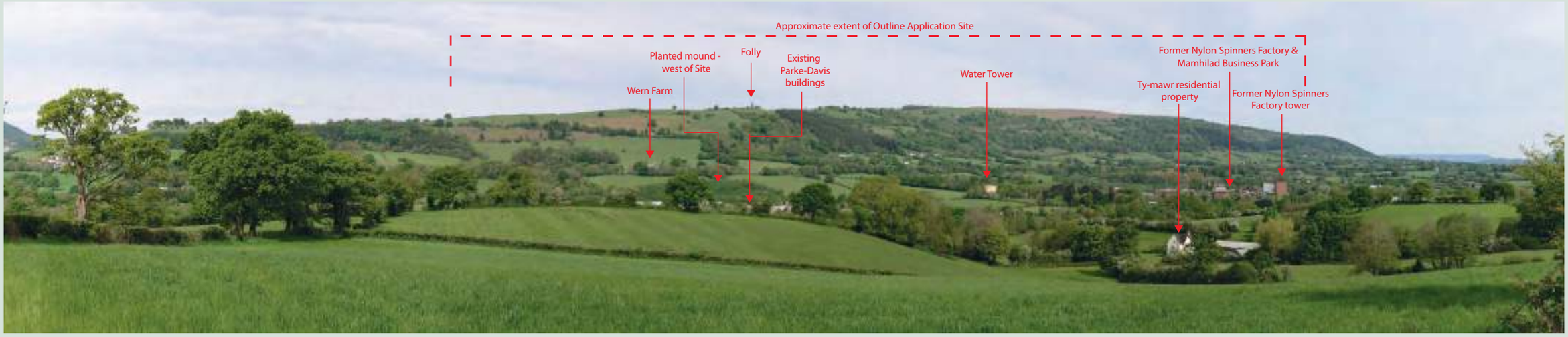
Key views of the Site have been developed into photomontages and are shown on the following pages.



Right:
Zone of Theoretical Visibility Plan with proposed viewpoints

VIEWPOINT 1

Close proximity views from the adjacent A4042 as it passes immediately to the east of the Site, close to a row of residential properties.

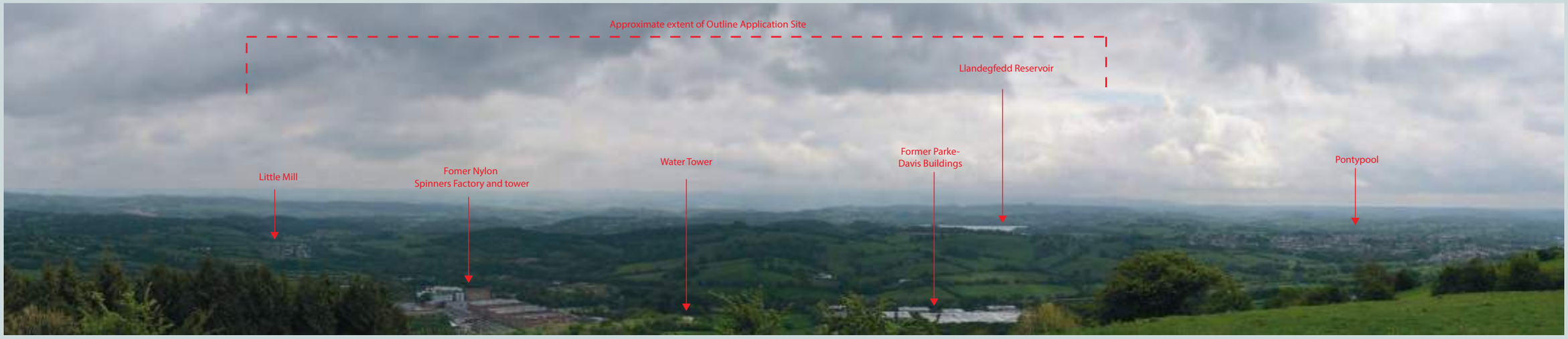


VIEWPOINT 2

Elevated view from sloping land to the east of the Site from local footpath 421 66/1 .

VIEWPOINT 6

View from part of the Monmouthshire and Brecon Canal, NCN Route 49, to the west, focussing on the southern part of the Proposed Development.



VIEWPOINT 8

Elevated view from the Folly to the west of the Site, on the edge of the Brecon Beacons National Park.

6 CONTEXT: SITE

3.4 HISTORY AND HERITAGE

HISTORY

The former Nylon Spinners Factory was built 1945-1948 to the design of Cardiff-based architect Sir Percy Edward Thomas (1883-1969). It was constructed on the site of a Second World War hutted camp housing workers who had been directed to the nearby Royal Ordnance Factory at Glascoed.

The factory was constructed as a brick-faced, steel-framed, two-storey structure providing almost a million square feet of production space. Raw nylon polymer was stored in a set of steel silos housed in a brick tower at the eastern end. This facilitated what the architect described as a uniflow production system. The tower formed the dominant architectural feature. A separate and lower ancillary wing ran along the southern side of the factory, linked to it by connecting corridors. Intervening courtyards were designed as formal gardens. The factory incorporated substantial amounts of glazing to enable views into the gardens from the factory floor.

External parts of the site were comprehensively landscaped, to the design of landscape architect James Lever of Sussex. A substantial clubhouse and a range of high quality sports facilities including a rifle range, were built on adjoining land.

Nylon had been developed in America in the 1930s and British Nylon Spinners (BNS) was established in January 1940 as a jointly-owned manufacturing subsidiary of ICI and Courtaulds. Mamhilad was selected as the site for the project as a result of Government policy to direct new industrial development to Development Areas where traditional industries were in decline. The Pontypool Works was officially opened by the Duchess of Kent on the 24 June 1949. In its early years, the factory was the source of all nylon yarn produced in Britain.

Facilities at the site were expanded throughout the second half of the twentieth century until production of nylon ceased at the works in February 2003. The factory was listed grade II* in 2005.

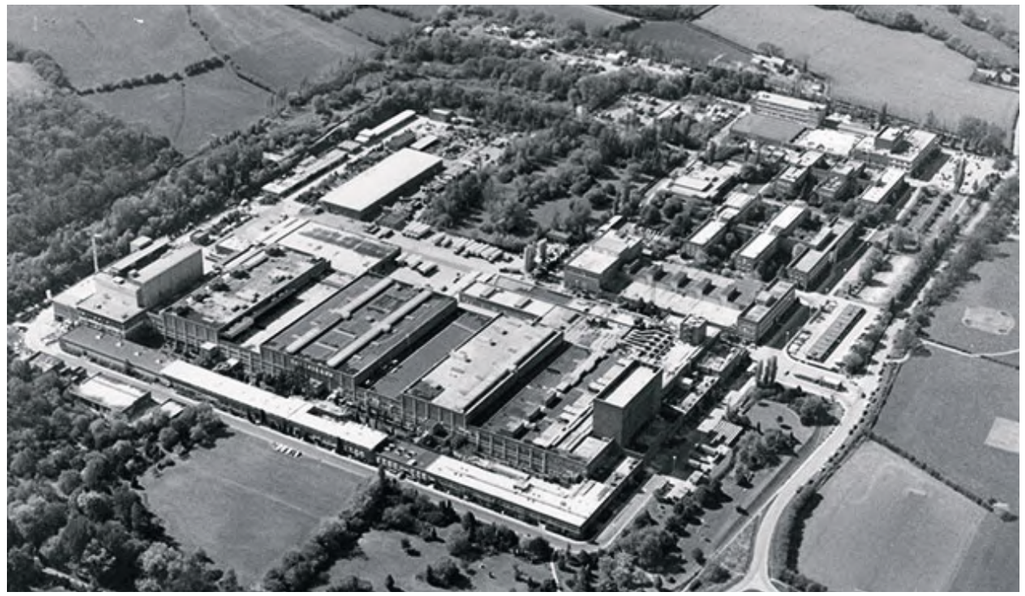
SIGNIFICANCE

The former Nylon Spinners Factory is significant as a pioneering example of industrial architecture applied to a pioneering industry, by a leading Welsh architect of the twentieth century. Technology developed at Pontypool was utilised by other large scale nylon spinning works in Britain and around the world.

Architecturally, the factory was conceived as a simple family of forms arranged in balanced asymmetry, with cuboid blocks articulating the different parts of the building. However, the clean lines of the original building have been debased by numerous insensitive additions.

The design of the factory was pioneering in its incorporation of windows with views in one direction into courtyard gardens and the other towards the Brecon Beacons. The site was also comprehensively landscaped. This attempt to create a pleasant working environment for a clean post-war industry stood in sharp contrast to the harsh working conditions that had been endured in the coal mines and steel works of South Wales.

The Pontypool Works are also significant as an early example of a large scale post-war modern industrial development directed to a depressed area by the Government.



Aerial photograph of site and former Nylon Spinners Factory in the foreground

3.5 ARCHAEOLOGY

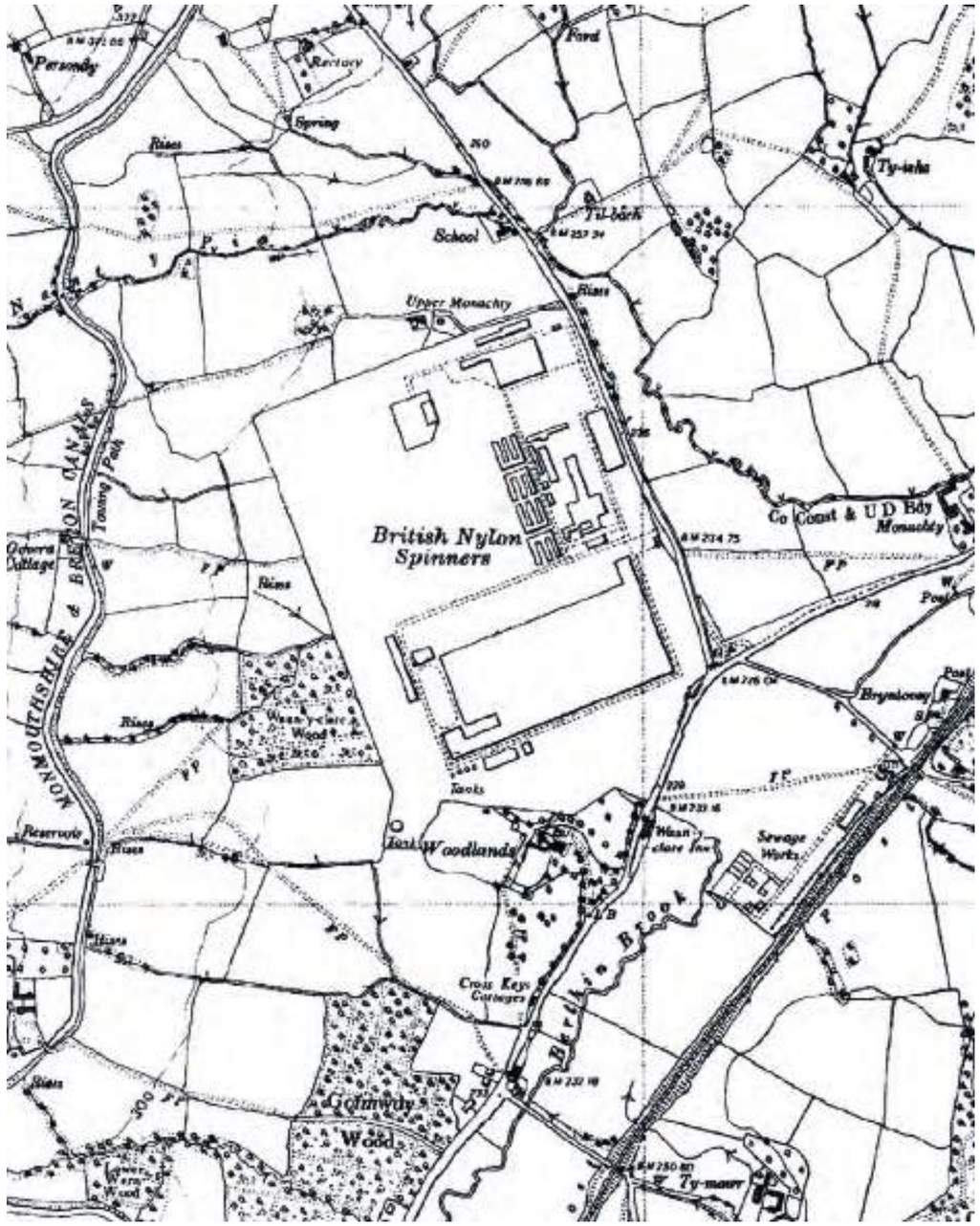
An Archaeological Desk-based Assessment (DBA) of the potential for the proposed development to impact on below-ground archaeology has been carried out. This updates a previous DBA carried out by the Glamorgan and Gwent Archaeological Trust in 2006.

The updated DBA concludes that the overall archaeological potential of the Site is low to moderate, though there is a single area of heightened archaeological potential, around the demolished nineteenth-century Woodlands Country House (NMR Ref 407275). The significance of buried remains across the Site is considered to be of local to regional level of interest.

The construction of the former Nylon Spinners Factory and the Parke-Davis Complex in the second half of the 20th century is likely to have truncated underlying archaeological deposits, however this has not been confirmed. Due to the potentially high level of truncation, the proposed development is unlikely to impact upon on buried archaeological remains in these areas.

In currently un-developed parts of the Site, the proposed development may impact upon buried archaeological deposits. The potential for such deposits is considered to be low to moderate across these areas, except for in and around the footprint of the former Woodlands Country House (NMR Ref 407275), where the potential for such deposits is considered to be high. Any remains encountered are likely to be of local to regional significance.

The updated DBA recommends that a programme of archaeological works be carried out alongside any construction or landscaping works associated with the development. An appropriate and proportionate scheme might include the monitoring of groundworks by a suitably experienced archaeologist during the construction phase. Furthermore, a program of test pitting within the former Nylon Spinners Factory and Parke-Davis Complex could help establish the depth of twentieth century truncation and the potential for underlying undisturbed deposits.



OS Extract 1954

3.6 ACCESS AND MOVEMENT

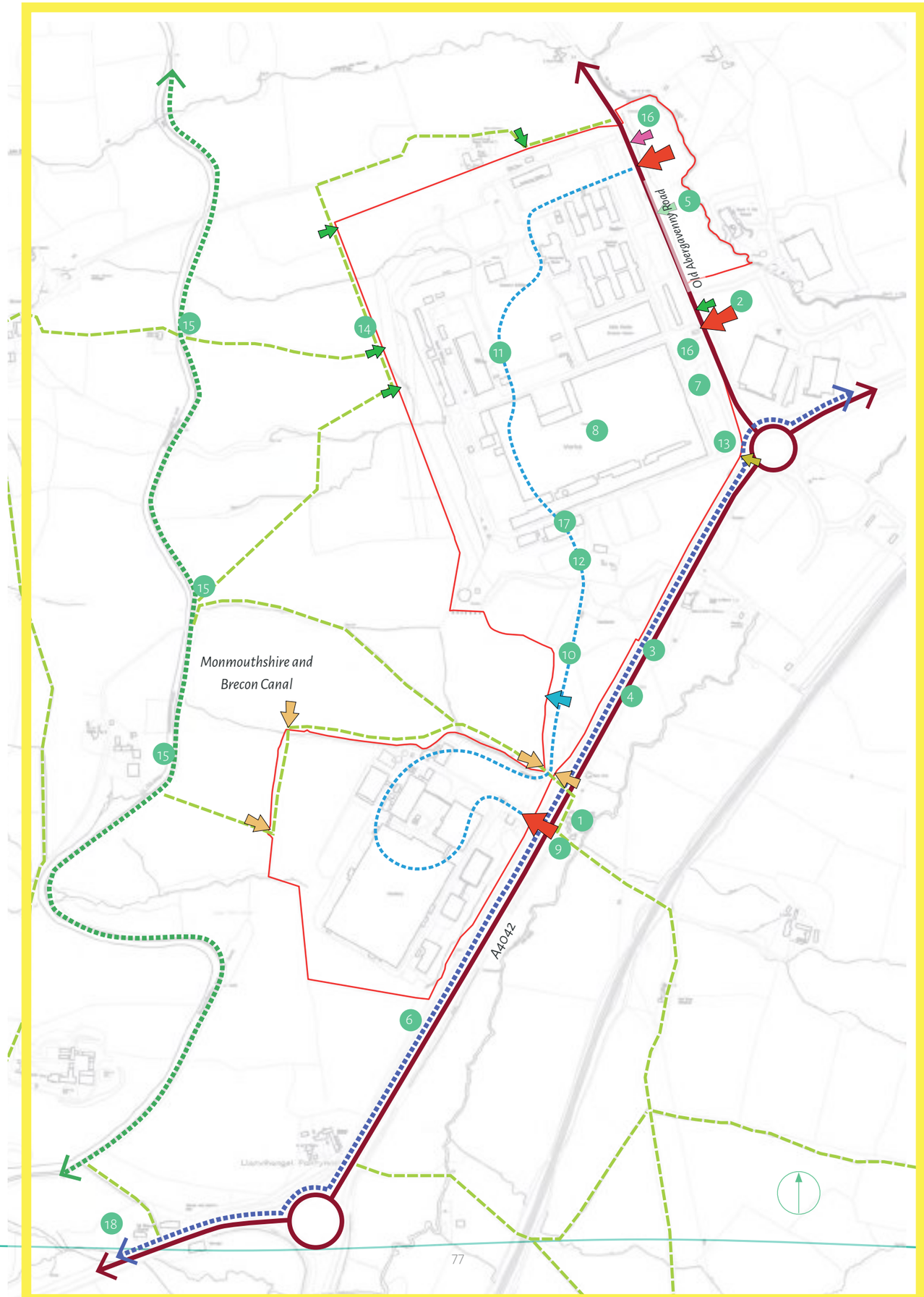
Set out below are the constraints and opportunities which the site offers in terms of access and movement.

CONSTRAINTS

1. *Access requirements for Pen-Y-Llan Lane*
2. *Existing commercial site access on north-east side of Old Abergavenny Road*
3. *Limits of highway land*
4. *Severance caused by the A4042*
5. *On-street parking on Old Abergavenny Road*
6. *No route diversion of long distance bus services using A4042*
7. *On site car parking requirements*
8. *Existing built form at Mamhilad Park Estate*

OPPORTUNITIES

9. *Improving highway access from the A4042 using existing access arrangements*
10. *Linking Mamhilad Park Estate and the Parke-Davis site*
11. *Quality streetscape design that encourages sustainable travel*
12. *New quality local bus service for the development*
13. *Improved accessibility for existing employees at Mamhilad Park Estate*
14. *To have high levels of walking and cycling at the proposed development*
15. *Walking and cycling links to the Monmouthshire and Brecon Canal path and proposed Pontypool to Usk route via A4042*
16. *Reuse of existing roads and car parks on site*
17. *Internalise travel because of mixed-use development*
18. *Access to Pontypool and New Inn rail station*



Right:
Access and Movement Constraints and Opportunities Plan

3.7 LANDSCAPE

The Site is not covered by any designation that recognises a specific landscape importance or value. The eastern boundary is defined by Old Abergavenny Road and the A4042. Numerous local footpaths traverse sloping land to the east and west of the Site. One footpath crosses the Site, and a number of footpaths follow the Site boundary or cross farmland in close proximity to the west.

The area on which the Site is located is dominated by its large scale buildings reflecting its former industrial uses. These large scale buildings form prominent iconic features within the landscape. Some remain in use, such as within Mamhilad Park Estate, whilst many are vacant and derelict such as the Parke-Davis buildings. Large areas of vacant hardstanding are present throughout the Site. These buildings are often dilapidated and neglected, which impacts greatly on the perceptual characteristics of the Site. Regardless of the amount of built development present within the Site, there is also a high degree of vegetation, with large blocks of woodland interspersed throughout the Site, including some notable blocks of Ancient Woodland and TPO trees.

Site boundaries are well treed and vegetation extends throughout the Site. This vegetation results in a high degree of enclosure, physically and visually separating the Site from adjacent landscapes, and screening views towards the Site; as well as providing a strong sense of containment which is experienced from within the Site itself. Despite this there is a clear visual connection with the surrounding landscape, with views extending to and from sloping elevated land to the east and west.

The Site lies alongside the main transport corridor linking Pontypool to the north, with the A4042 and railway line passing parallel to the east of the Site. Outside of settlement development of Pontypool to the south, and industrial development within the Site, the land is predominantly used for agriculture, in the form of pasture with some occasional pockets of arable cultivation. Farmland is interspersed by numerous woodland blocks, many of which are ancient woodland. Rural lanes, field boundaries and watercourses are often lined by mature trees and as such there is a strong green infrastructure network through the surrounding landscape. The rising escarpment comprises pasture interspersed with large areas of woodland along slopes, with open moorland present along the plateaux tops.

The mix of different areas of built development, including notable derelict areas and areas of hardstanding, as well as woodland, pockets of grassland and areas of open space associated with former or current industry, creates a somewhat discordant and varied landscape pattern.

Ancient Woodland within the site will be retained

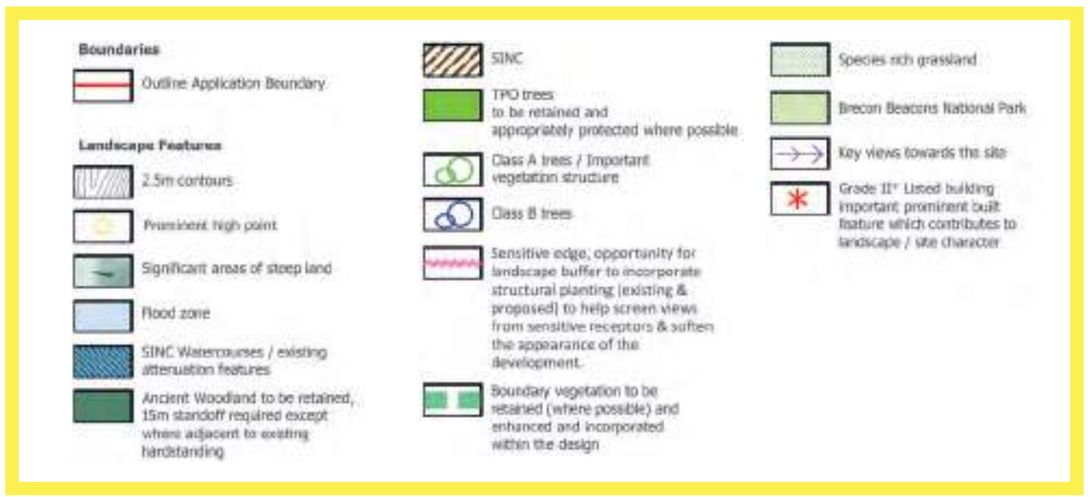
CONSTRAINTS

- Sensitive receptors to the west, north west and east on elevated land – including footpaths and occasional residential properties;
- Brecon Beacons National Park to the west and stretching north west;
- Footpath 421 9/1 which crosses the Site; and adjoining footpaths on adjoining farmland, including 421 8/1 & 421 10/1;
- Close proximity to residential properties, such as along the A4042, Old Abergavenny Road and south of the Site;
- Ancient woodland & TPO trees on Site;
- Existing vegetation through the Site and particularly along its boundaries, which provides a strong green infrastructure, screening benefits as well as ecological/biodiversity benefits;
- Character of existing built form which form iconic architecturally and culturally important elements, such as the former Nylon Spinners Factory and associated buildings; and
- Existing open space, such as that located immediately to the south east of the former Nylon Spinners Factory, with amenity grassland, ornamental shrub planting and attractive trees.

OPPORTUNITIES

- To retain and enhance existing green infrastructure network through the Site and particularly along its boundaries, to help integrate the proposed development into the surrounding landscape;
- To retain Ancient woodland & TPO trees on Site;
- To soften appearance of built development and screen views from sensitive receptors to the west, through implementation of an appropriate landscape buffer;
- To create new public open spaces and opportunities for recreation;
- To retain and reuse iconic and architecturally significant buildings as part of the development;
- To enhance the biodiversity of the Site;
- To improve PRoW linkages across Site and to existing PRoW in adjacent countryside, and provide better accessibility to the nearby PRoW and the Canal;
- NCN Route 49 along the Monmouthshire and Brecon Canal;
- To improve the landscape character and condition of the Site, where design and materials create a distinct sense of place that celebrates the Site's cultural importance for industry and employment and rural setting of the National Park.

Existing planting in the Workers' Garden to the south east of the listed building



Right:
Landscape Constraints and Opportunities Plan

WATER SUPPLY

Water supply is by Dwr Cymru Welsh Water (DWCC). Water mains are present on the boundary of the site and supply the buildings on site. There are two non-potable mains connected to the existing water tower located in the centre of the site. These are believed to be associated with the earlier industrial processes but discussions with DWCC are ongoing in this respect or if they are still live. The mains have an associated easement but it is possible to divert these to suit the masterplan layout

GAS

Gas transport and supply is by Wales and West Utilities (WWU). There is a High Pressure Gas Main within the site (HS008 Pontypool to Abergavenny PSSR ref 1549). The main has stand-off zones which are approximately: Inner 15m, Middle 23m, Outer 31m.

Schools are restricted to the Outer zone only, residential development is permitted within the Outer and Middle Zones.

There is a High Pressure branch feeding the former factory which is subject to the same restrictions as the main pipeline. The development does not require a high pressure supply as the on site gas distribution will be completed by a local low pressure network and it is proposed to remove the high pressure branch and locate a gas governor close to the site boundary to reduce the pressure.

ELECTRICITY

Electricity is provided by Western Power Distribution (WPD). There is a significant sub-station on site fed by 132kV overhead lines providing 66kV overhead and 33kV underground lines to the locality. Overhead lines require safety clearance zones that take into account: cable height, wind, catenary effects, and the height of existing and proposed surrounding objects. The development can respect the safety clearances or divert the overhead lines to a different overhead route.

It is anticipated that the existing 66kV overhead lines will be diverted at the sub-station to run parallel with the retained 132kV overhead line route to the site boundary and then parallel with the A4042 to the current road crossing point.

Right:
The existing water tower on the western site boundary

9 DESIGN

5.1 DESIGN ETHOS

INTRODUCTION

Chapter 8 presents the design proposals which have been developed and informed through the assessment and involvement stages set out in Chapters 1 to 8. Chapter 9 is split into a number of different parts.

» An explanation of how our proposals reflect the ethos of the New Model Village Movement of the late 19th Century where successful communities were built around major employment uses by landowners with strong legacy aspirations.

» The setting out of the design concept and a number of clear design principles that underpin the illustrative masterplan and strategies explained later in the DAS.

» The chapter concludes with the parameter plans which define the extent of the proposed land uses, densities, scale and green infrastructure.

Right:
The new model village movement, including Saltaire provides inspiration for Mamhilad

THE NEW MODEL VILLAGE MOVEMENT

The creation of a new village at Mamhilad by a local landowner around a large employment use reflects many of the qualities of the New Model Village Movement of the late 19th Century.

Although there are many other examples, New Earswick, Saltaire, and Port Sunlight have attributes that resonant with the vision proposed for Mamhilad. All three model villages were founded on the following principles:

- They were established around a regionally significant employment use;
- They created thriving self-sufficient communities;
- They promoted a healthy lifestyle with large areas of green open space;
- They were based on high quality distinctive built environments;
- They were designed as walkable neighbourhoods;
- They continue to be successful many years after the original employment, for which they were built, has been replaced or converted to other uses including for tourism.

An analysis of these principles and how they have contributed to creating a strong sense of community for these areas provides a number of positive contextual references that inform the design proposals for Mamhilad.

Clockwise From Top :
Mamhilad Location Plan
New Earswick Location Plan
Saltaire Location Plan
Port Sunlight Location Plan

NEW EARSWICK

» New Earswick model village was founded by successful York confectionery businessman and philanthropist Joseph Rowntree.

» New Earswick was built as a genuine mixed community.

» Housing was built in a green setting incorporating large open spaces near the centre of the site, and 36 community allotments.

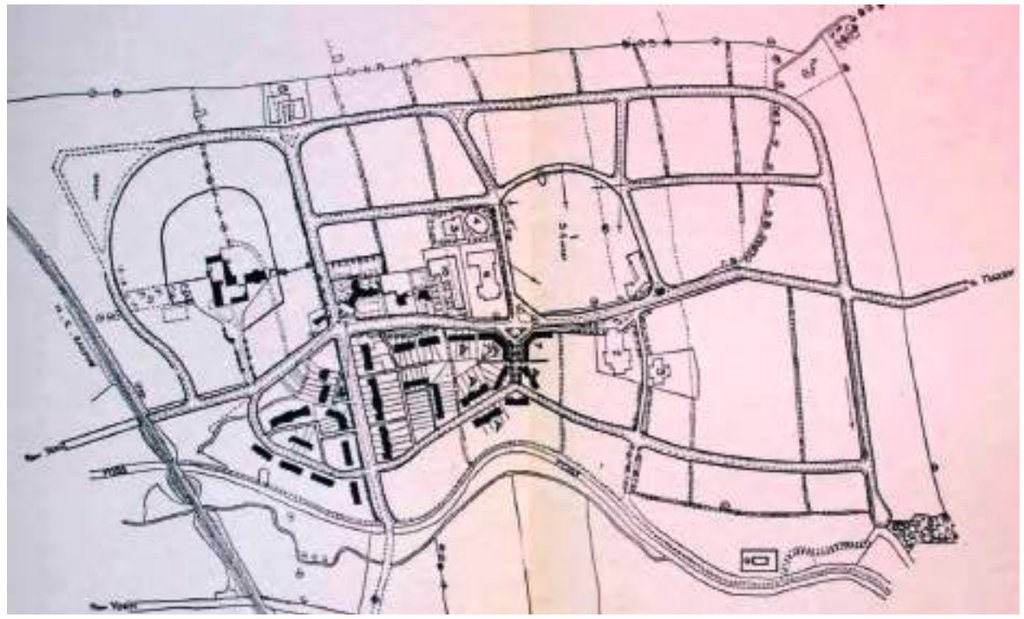
» Dwellings are mainly 2 storey semi-detached or short terraces of 3-7 dwellings; with a small proportion of bungalows and some 3 storey buildings edge the two large central open spaces.

» It was a living demonstration of the way in which good quality housing, in a pleasant green and walkable environment could allow people to lead fulfilled lives and strengthen the bonds of community.

» New Earswick continues to be a thriving community with a range of facilities, projects and programmes for involving residents of all ages. The village has a Primary School; a local community centre, the Folk Hall; recreational facilities; a library based in the Integrated Children's Centre at the local primary school, a doctor's surgery and a range of shops, including two general stores, a pet shop and Post Office.

"I do not want to establish communities bearing the stamp of charity but rather of rightly ordered and self-governing communities".

Joseph Rowntree



Historic plan of New Earswick

New Earswick Green and Local Centre

New Earswick Green Route and housing

SALTAIRE

» Saltaire is a purpose-built model Victorian village. It is named after Sir Titus Salt who built a textile mill, known as Salts Mill, and the adjacent River Aire.

» The village itself was built to provide self-contained living space for the workers at his woollen mills. Salt built neat stone houses for his workers; an institute for recreation and education, with a library, a reading room, a concert hall, billiard room, science laboratory and a gymnasium. The village had a school for the children of the workers, almshouses, allotments and a park.

» Saltaire Park (now Roberts Park) is a focus for the village and covers approximately 6 hectares. The park also contained a cricket pitch, a promenade, pavilion, bandstands, croquet and bowling greens, planting and a semi-formal layout of paths. The village was also provided with allotments.

» Salt employed architects Lockwood and Mawson to design and build a distinctive architectural style.

» Workers were housed in neat stone dwellings predominately terraced of 2-3 storeys.

» Saltaire is small enough to work as a coherent neighbourhood, to generate a community spirit and support a range of social facilities, independent retail businesses and events.

» Salts Mill has undergone restoration and the flexible partitioning of the original large workspaces to convert the old mill into economically viable uses. The main mill houses a mixture of business, commerce, leisure and residential use; notably including a large gallery of the works of the Bradford-born artist David Hockney. The 'New Mill', on the other side of the canal, is divided between offices for the local NHS Trusts and residential flats.

Saltaire Mill 1853 Gallery

"Throughout the village, cleanliness, cheerfulness and order must reign supreme"

Titus Salt

Historic plan of Saltaire

Saltaire Mill and allotments

Saltaire terraced housing

PORT SUNLIGHT

» Port Sunlight model village was built in the late 1880s by William Hesketh Lever to expand his soap-making business, Lever Brothers, now part of Unilever. The village name was derived from Lever Brothers' most popular brand of soap, "Sunlight".

» William Lever personally supervised planning the village, which is arguably one of the finest surviving examples of early urban planning in the UK. Between 1899 and 1914, approximately 900 houses were built to house a population of 3,500. Once completed the village also included the Lady Lever Art Gallery, schools, a concert hall, an open air swimming pool, a church, a temperance hotel, and allotments.

» Lever's aim was to "provide for you [the Port Sunlight community] everything that makes life pleasant – nice houses, comfortable homes, and healthy recreation."

» Port Sunlight contains a significant proportion of walkable green open space including the central Diamond Park, 'The Dell', allotment gardens, and recreation ground and pitches.

» Lever employed over 30 different architects in the building of the village resulting in a mix of architectural styles enhanced by the parkland and some excellent public sculptures. The backs of any of the houses cannot be seen, and each house is unique.

» The whole of Port Sunlight is now a Conservation Area declared in 1978 containing 900 Grade II listed buildings, and is a major tourist attraction for The Wirral.

Saltaire Mill and allotments

"Provide for you [the Port Sunlight community] everything that makes life pleasant – nice houses, comfortable homes, and healthy recreation."

Lever

Historic plan of Port Sunlight

Saltaire terraced housing

Port Sunlight Dell

5.2 DESIGN CONCEPT

DESIGN CONCEPT

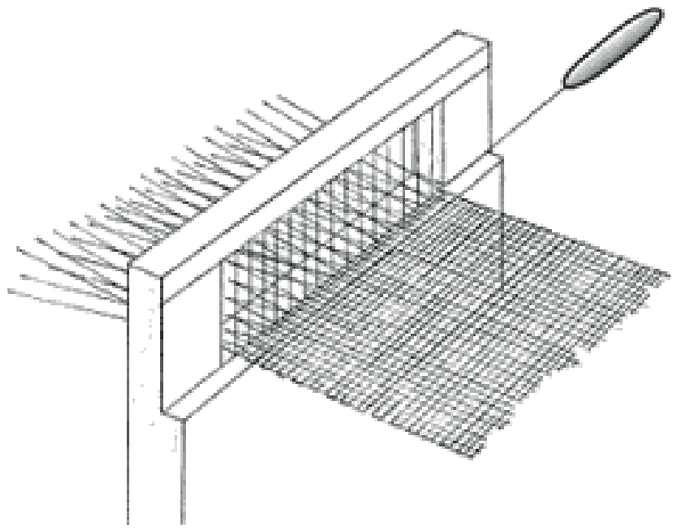
Many of the New Model Villages had a clear structure that was founded on a distinctive spatial concept. From the assessment of the geographical features and geometries of Mamhilad, combined with the distinctive history of the factory, a clear design concept has emerged.

The concept for Mamhilad reflects the pioneering production process which took place in the Nylon Factory taking raw, organic material at the start of the process and transforming it into formal, manmade fibre at the end.

These ideas are reflected in the spatial structure of the village:

» The southern part of the site has a more natural character through its contours and landscape and so reflects the raw, organic start of the production process.

» The northern part of the site based around the factory reflects the more formalised end product of Nylon.



The production process - organic, raw material going in with a formalised man made product coming out

The Nylon production process has influenced the structure of the grid.

The Design Concept addresses all of the key issues and maximises the opportunities provided by the site and the context. It provides the framework for the design proposals set out in the following chapter.

The Design Concept Plan opposite shows the following key elements which have been proposed in response to the evaluation carried out in the assessment stage:

» Retaining key buildings and using them to add character and dialogue with the past;

» Existing key buildings help create a place with local identity;

» Capitalising on access points and gateways;

» Bringing the surrounding landscape into and through the site;

» Ecological and landscape structure links the key existing habitats;

» Creating quality edges, frontages, nodal points and character areas;

» Establishing a water grid;

» Making a connected place through streets and routes- walking, cycling and public transport;

» Provide a mix of uses and densities to promote a viable and varied community structure.

Right:
Design Concept Plan

5.3 GENERAL PLACEMAKING PRINCIPLES

The site-wide design and access principles below will assist in the delivery of the Concept and Vision presented at the start of this Design and Access Statement.

ACCESS PRINCIPLES

The development form will ensure that all buildings and the public realm are accessible to everyone, including the young, the elderly, disabled and parents with pushchairs. The aim of inclusive design is to remove barriers which create undue effort, separation or special treatment and enable everyone to participate equally in mainstream activities independently with choice and dignity.

Where possible the proposal will establish clear, legible and convenient connections to adjacent facilities in Pontypool and other neighbouring villages for pedestrians and cyclists.

The proposed development has been carefully designed to provide for safe, convenient, and direct connections. The following principles are to be applied:

- The creation of a legible development structure;
- A small network of connected routes, and spaces so that movements are attractive and safe;
- Streets designed as places rather than solely in response to traffic or engineering considerations;
- The layout of development to encourage low traffic speeds;
- Parking for vehicles and cycles will be conveniently located;
- The over-arching principle is to provide easy and convenient access to public spaces for all users.

MOVEMENT, MOBILITY AND INCLUSIVE DESIGN

» Create a clear and legible hierarchy of routes and spaces;

» Provide for sustainable transport links with the surrounding area;

» Provide for an accessible environment for all users.

ACCESS AND MOVEMENT

The accessibility principles seek to maximise permeability and connection. It is important that movements by pedestrians and cyclists are also safe. For this reason, a number of strategic principles will be applied to the development to provide for safe and secure movement: The underlying principles set out in 'Safer Places: The Planning System and Crime Prevention' are as follows:

» Movement routes follow desire lines across and through the site and are both direct and legible;

» Segregation between transport modes is integrated to provide for activity and natural surveillance;

» Footpaths and cycle routes will generally be overlooked where possible; and

» Underused routes that can become vulnerable to, or facilitate, crime are to be avoided.

SAFETY AND SECURITY

The development will reflect best practice principles in the ODPM document 'Safer Places: The Planning System and Crime Prevention. Relevant principles from this document are set out below:

» The proposals will create a sense of community and ownership by creating distinct character areas;

» Routes will be designed to be as active as possible;

» Streets and spaces will be overlooked.

STRUCTURE

» The types of building and how they are laid out has an influence on safety and sustainability;

» A safe urban structure will be provided with active street frontages and secure private boundaries;

» Private spaces will largely be enclosed within perimeter blocks;

» Blank façades such as gable ends which are opportunities for graffiti will be kept to a minimum;

» Private spaces at the rear of properties should be clearly defined and enclosed;

» The boundaries between public and private spaces should be clearly defined;

» Rear gardens of houses should, where possible, back onto other rear gardens rather than side roads, service lanes or footpaths;

» High fences and walls that actively impede access will be provided in places that are vulnerable to crime, such as the back of dwellings; and

» Lower barriers, including railings will signify the public/private divide.

SURVEILLANCE

Overlooking of all open space, including streets, will be maximised to discourage crime and anti-social behaviour. Particular features will include:

» Windows and doors facing onto the street to create an active frontage;

» Spaces designed to minimise the number of places to hide and to encourage activity; and

» Play spaces, communal areas and parking to be overlooked.

OWNERSHIP

The proposals have been designed to promote a sense of community and ownership, to help foster feelings of respect and responsibility. This will be encouraged through:

» Distinctive character areas;

» A clear distinction between public, semi-private/ communal and private spaces;

» Attractive new high-quality open space; and

» Recognisable streets which encourage use and personalisation of the street scene.

CHARACTER AND CONTEXT

» Create a development with a strong identity which also responds to the distinctiveness of the context;

» Provide for a strong landscape and green character within the development;

» Incorporate views and vistas to the surrounding context; and

» The development should provide for reasonable expectations of car ownership and should accommodate car parking in a way that does not undermine the character of the development.

QUALITY AND MANAGEMENT OF THE PUBLIC REALM

» Provide for an integrated and multi-functional open space network (incorporating play areas, pedestrian and cycle routes);

» A 'perimeter block' principle will be applied to ensure that public spaces and streets are appropriately, defined and overlooked; and

» Create usable, attractive and well-defined streets and spaces.

LEGIBILITY

The development layout should be easy to understand and move around.

ADAPTABILITY, DIVERSITY AND VARIETY

The development should provide for a mix of uses and dwelling types.

HIGH QUALITY BUILT FORM

» Key spaces, places and routes will be defined by interesting and varied built form;

» Buildings will be arranged so that they have a clear front and back, with the front facing the public realm; and

» The use of appropriate materials and details will enhance the quality of built form.

PERMEABILITY

Create a development structure that provides for direct movement along desire lines between destinations.

PHYSICAL PROTECTION

At a detailed level an effective way to prevent property crime is to make the property itself as secure as possible. However, such security measures will need to be selected to avoid compromising the quality of the local environment.

MANAGEMENT AND MAINTENANCE

A high quality of design throughout the development, including new streets, and open spaces, together with ongoing maintenance will help to promote respect towards the environment and therefore increase its use and safety.

ACTIVITY

The proposals have been designed to encourage appropriate levels of activity, helping to discourage crime and provide a sense of safety and security at all times. In particular:

» The public realm will be designed to be enjoyed by a wide range of people; and

» Care has been taken to ensure that the mix of uses in a locality are compatible;

ENERGY AND RESOURCE EFFICIENCY

» Create a structure of development that will minimise carbon dioxide emissions by encouraging trips by non-car modes of transport;

» Thermally efficient building fabric with a 'fabric first' approach to home insulation and energy consumption reduction;

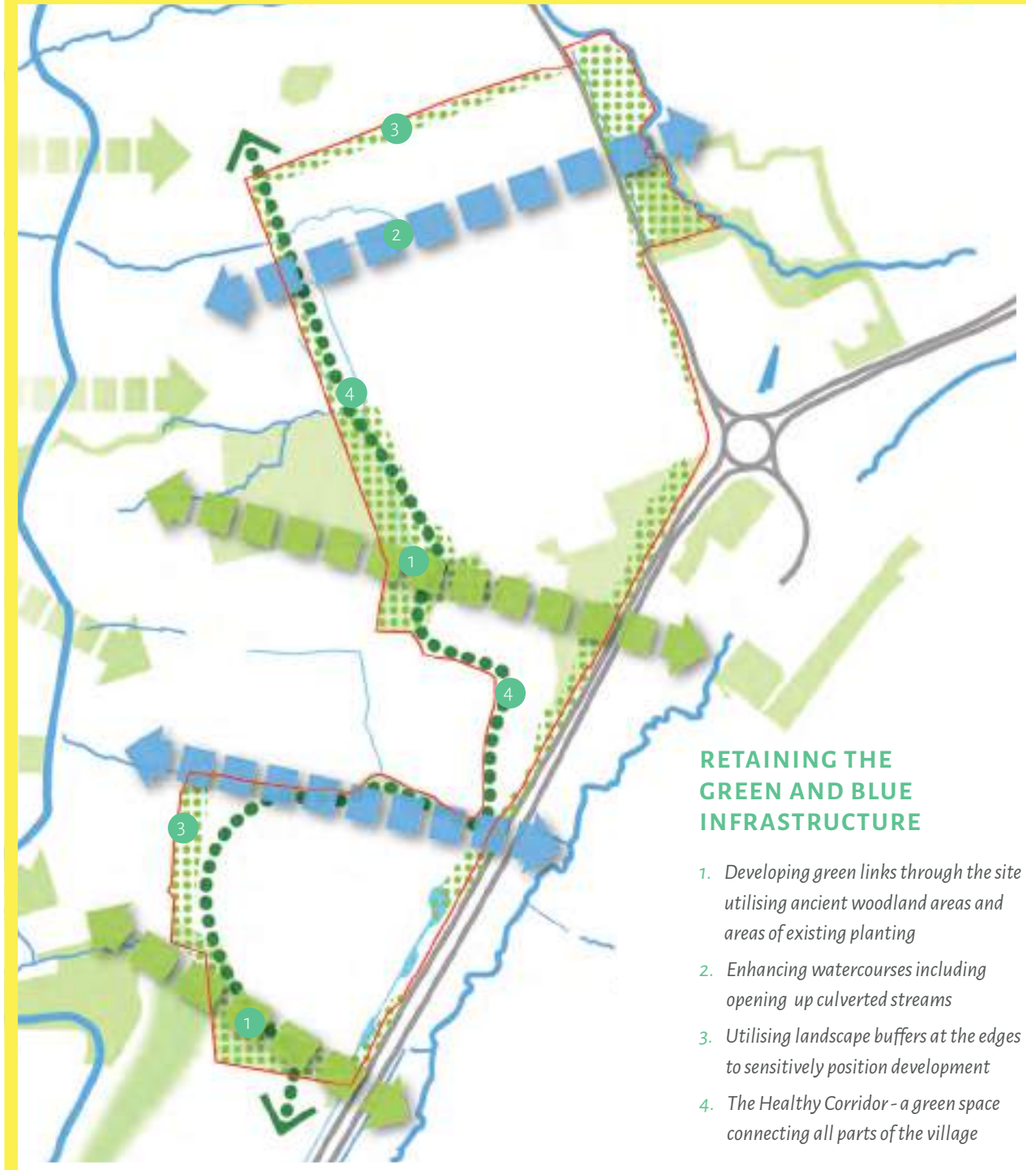
» Low water use sanitary features to reduce internal portable water consumption.

5.4 SITE SPECIFIC DESIGN PRINCIPLES

The General Placemaking Principles are supported by Site Specific Principles. These principles are shaped by important site features and the aspiration, as set out in the vision, to create a high quality distinctive development that responds to the unique qualities of the site.

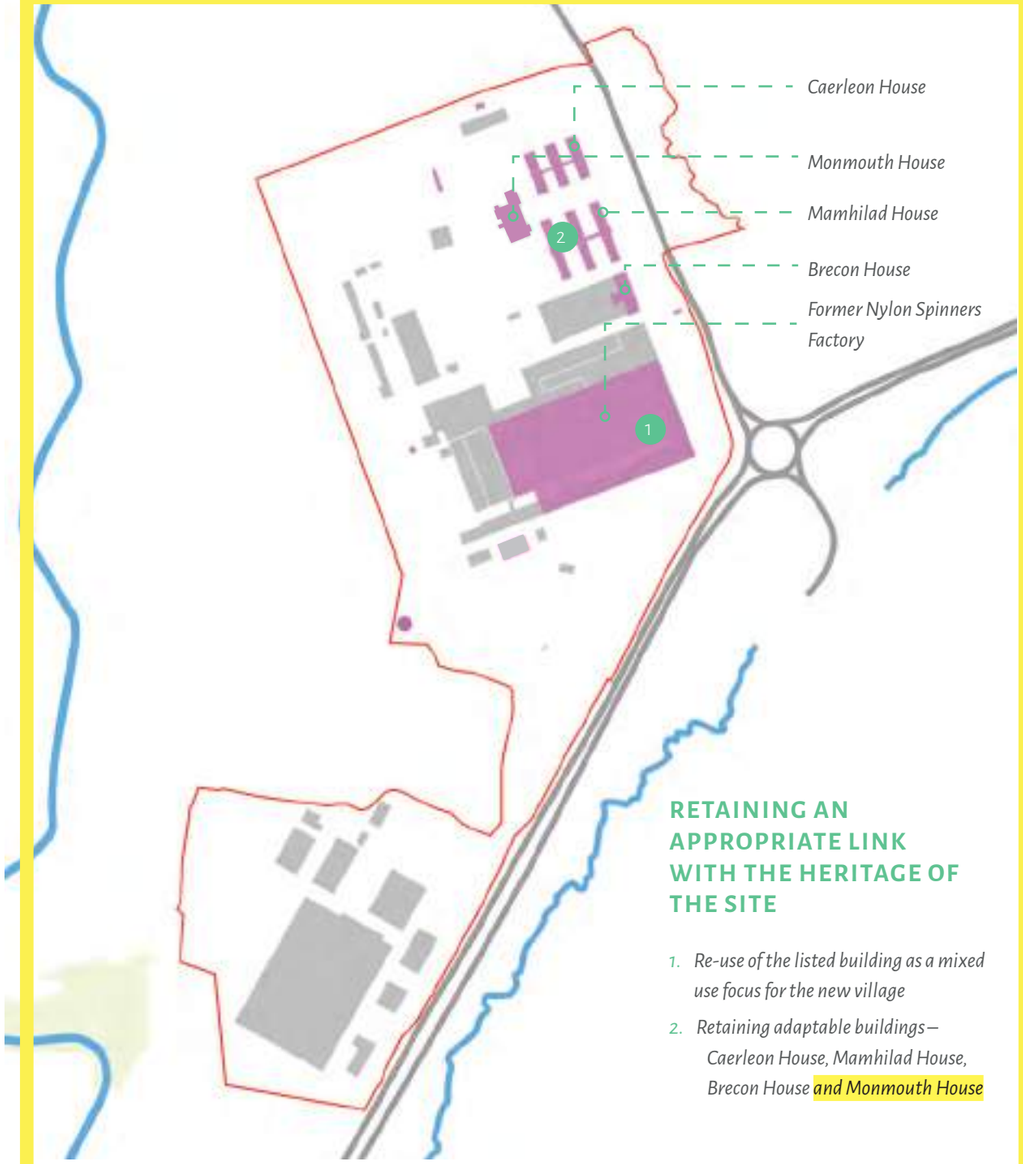
The site specific design principles are illustrated on the following pages.

Former Nylon Spinners Factory and Brecon Beacons beyond



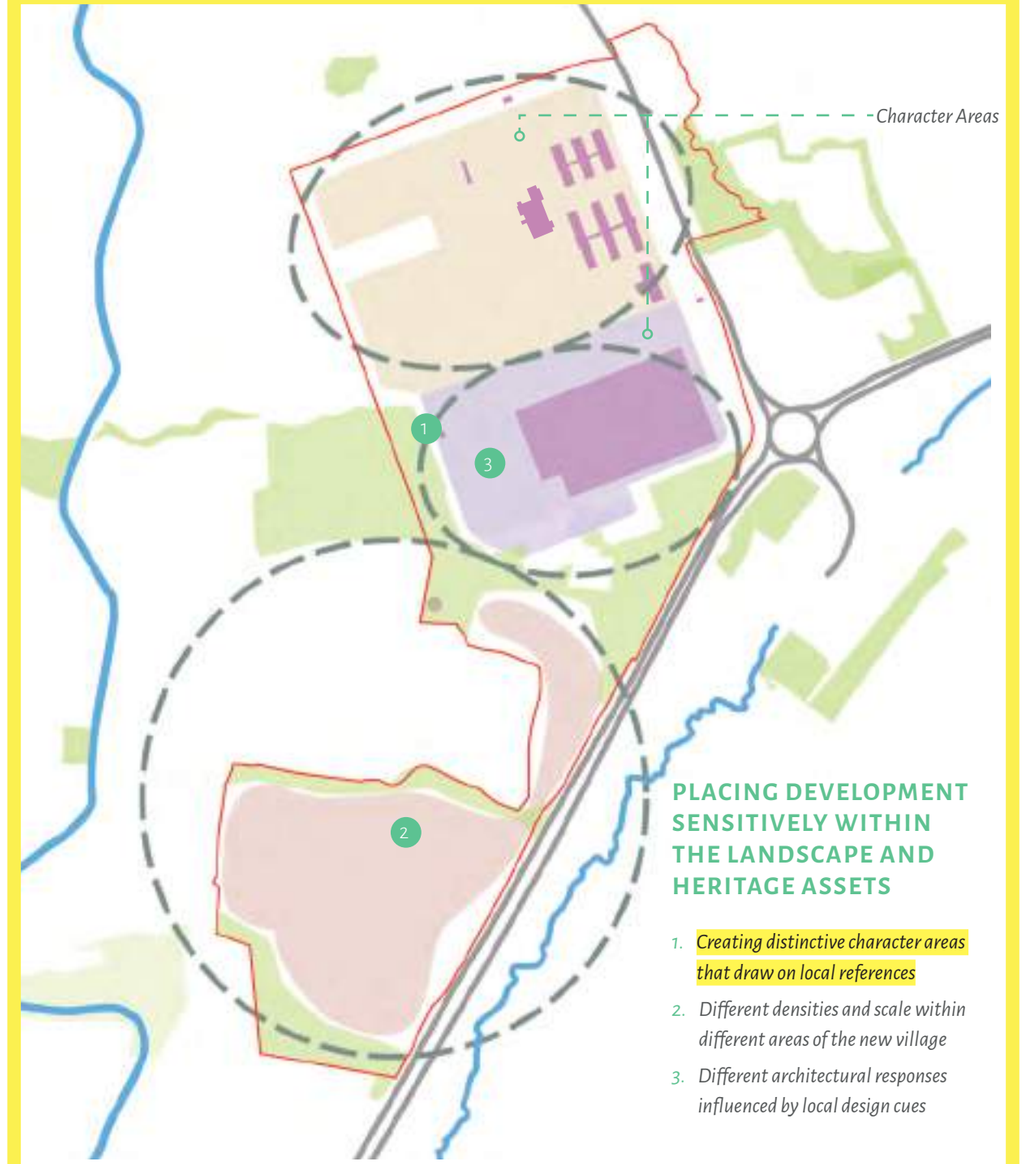
RETAINING THE GREEN AND BLUE INFRASTRUCTURE

1. *Developing green links through the site utilising ancient woodland areas and areas of existing planting*
2. *Enhancing watercourses including opening up culverted streams*
3. *Utilising landscape buffers at the edges to sensitively position development*
4. *The Healthy Corridor - a green space connecting all parts of the village*



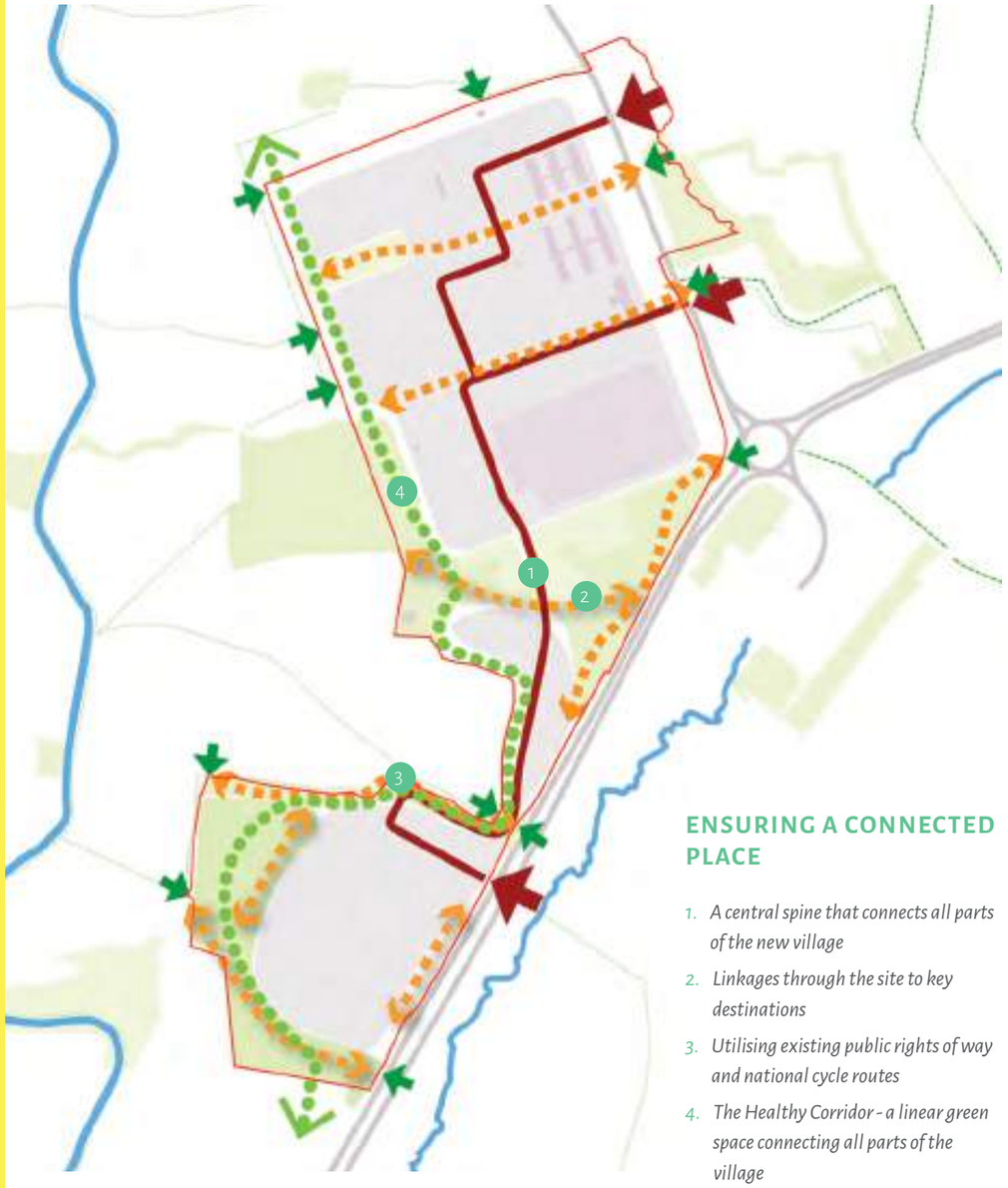
RETAINING AN APPROPRIATE LINK WITH THE HERITAGE OF THE SITE

1. *Re-use of the listed building as a mixed use focus for the new village*
2. *Retaining adaptable buildings— Caerleon House, Mamhilad House, Brecon House and Monmouth House*



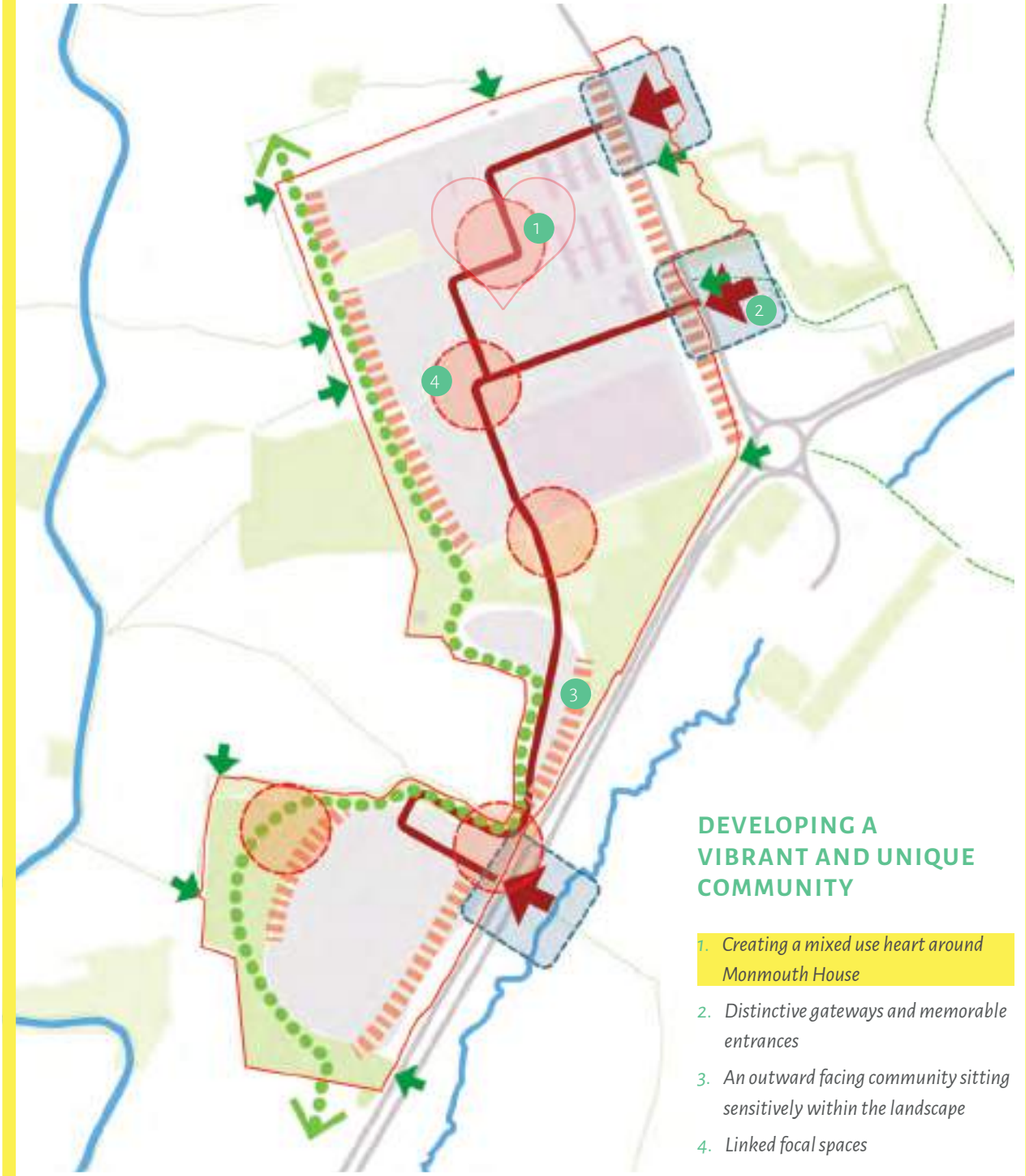
PLACING DEVELOPMENT SENSITIVELY WITHIN THE LANDSCAPE AND HERITAGE ASSETS

1. *Creating distinctive character areas that draw on local references*
2. *Different densities and scale within different areas of the new village*
3. *Different architectural responses influenced by local design cues*



ENSURING A CONNECTED PLACE

1. *A central spine that connects all parts of the new village*
2. *Linkages through the site to key destinations*
3. *Utilising existing public rights of way and national cycle routes*
4. *The Healthy Corridor - a linear green space connecting all parts of the village*



DEVELOPING A VIBRANT AND UNIQUE COMMUNITY

1. *Creating a mixed use heart around Monmouth House*
2. *Distinctive gateways and memorable entrances*
3. *An outward facing community sitting sensitively within the landscape*
4. *Linked focal spaces*

5.5 PARAMETER PLANS

LAND USE AND AMOUNT

Land Use & Amount

The Land use Parameter plan presented here defines the extent of the proposed Land uses.

Residential

Up to 900 dwellings will be provided in total including within the Neighbourhood Centre. Approximately 19 hectares of residential land is proposed comprising a range of dwelling types. The highest density area proposed will be located along the main vehicular route and closest to site facilities. The lowest density areas are along the edges of the development.

School

1.6 hectares of land is to be provided for a primary school.

Employment Use

A mix of retained and proposed office use.

Open Space

A well-connected and integrated network of over 19 hectares including: public open space, sports provision, planting, existing ancient woodland and landscape buffer.

Right:
Land Use And Amount Parameter Plan

SCALE

The length, width & height of buildings will define the streets and spaces and reflect their importance and thereby assist local legibility.

Residential Uses

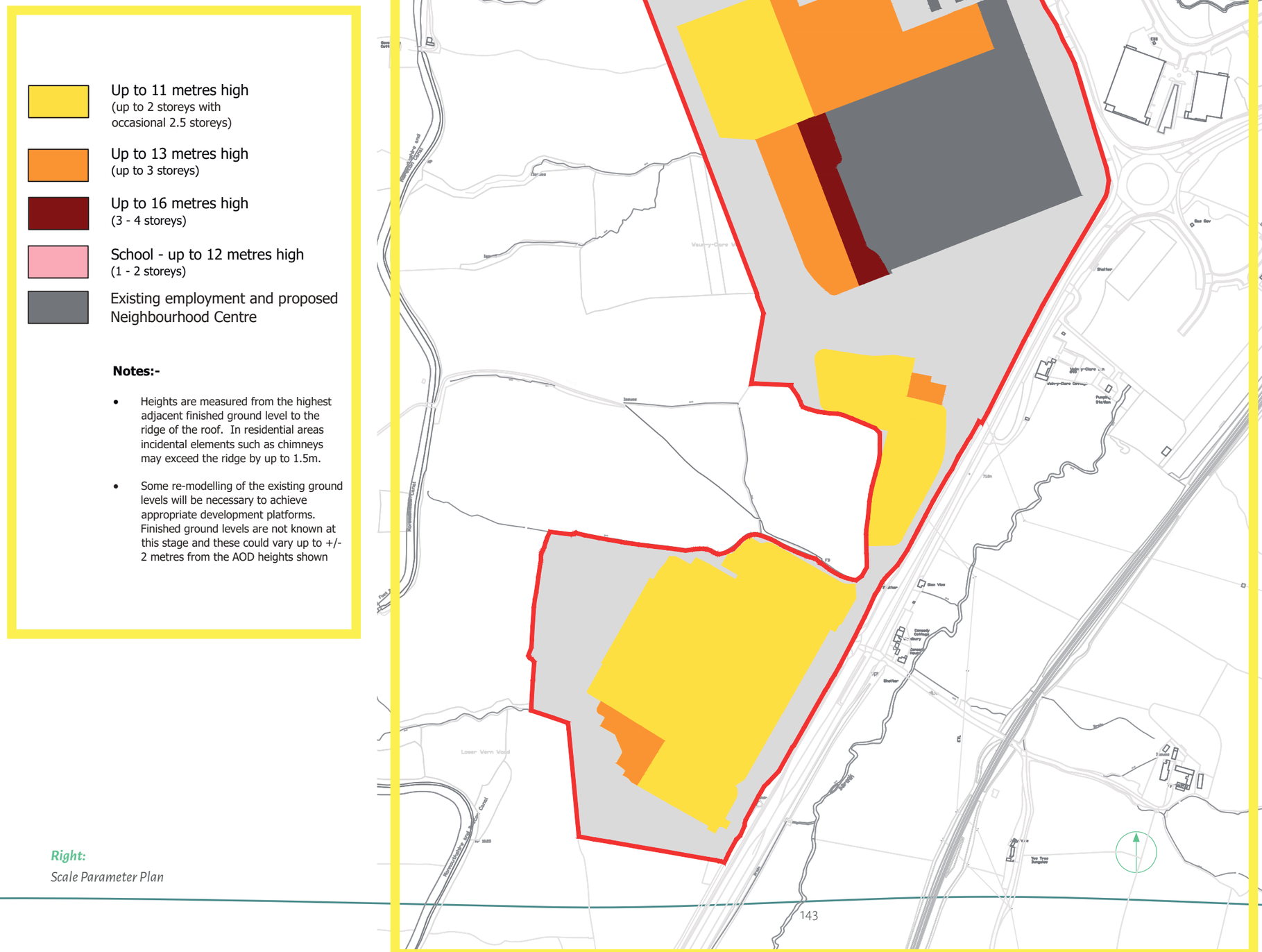
A clear hierarchy has been established with respect to the height of proposed buildings to achieve a legible structure.

Within areas identified as being the most visible at the western edges of the site a maximum of 2.5 storeys is proposed.

Residential development within the northern area will be 2.5-3 storeys with occasional 4 storeys particularly along the Spine Route to the west of the former Nylon Spinners Factory.

School Use

The school buildings will be max 2 storeys.



Right:
Scale Parameter Plan

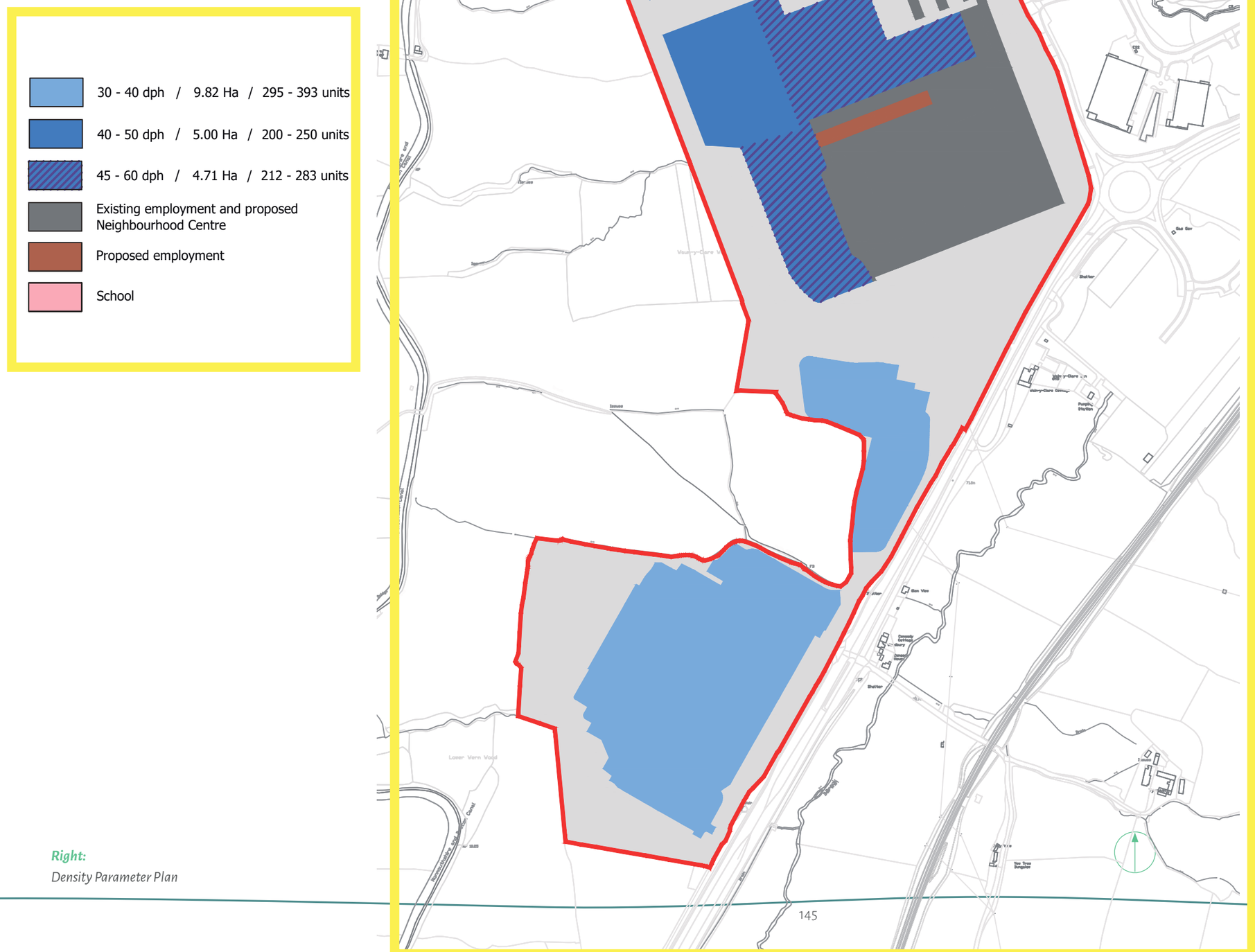
DENSITY

The development will provide for up to 900 new dwellings.

The topography of the site and the existing landscape together with the vision to create a 'new neighbourhood' mean that the densities will range from 30-50 dwellings per hectare. The Neighbourhood Centre includes additional units. Variation in residential density is proposed to enhance legibility and place-making.

The highest densities (up to 60 dph) are proposed in the northern part of the site closest to local facilities such as the Neighbourhood Centre (including potential community facilities), bus stops, primary school, and around the listed building. Lower density development is confined to the more landscape sensitive areas in the southern part of the site.

This density range will ensure a mix of dwelling types and sizes from starter units through to intermediate and large detached housing to reflect the need of the local area.



Right:
Density Parameter Plan

GREEN INFRASTRUCTURE

A network of linked open spaces will be accessible to new residents and the existing community.

The Green Infrastructure parameter plan defines the key 'green' land within the development. Public Open Space has been provided in accordance with TCBC standards.

The plan shows how a multi-functional network of green uses will permeate the development providing a distinctive character with green spaces within a short walkable distance from all properties.

The parameter plan provides for the retention of existing planting and trees throughout the site, where possible.

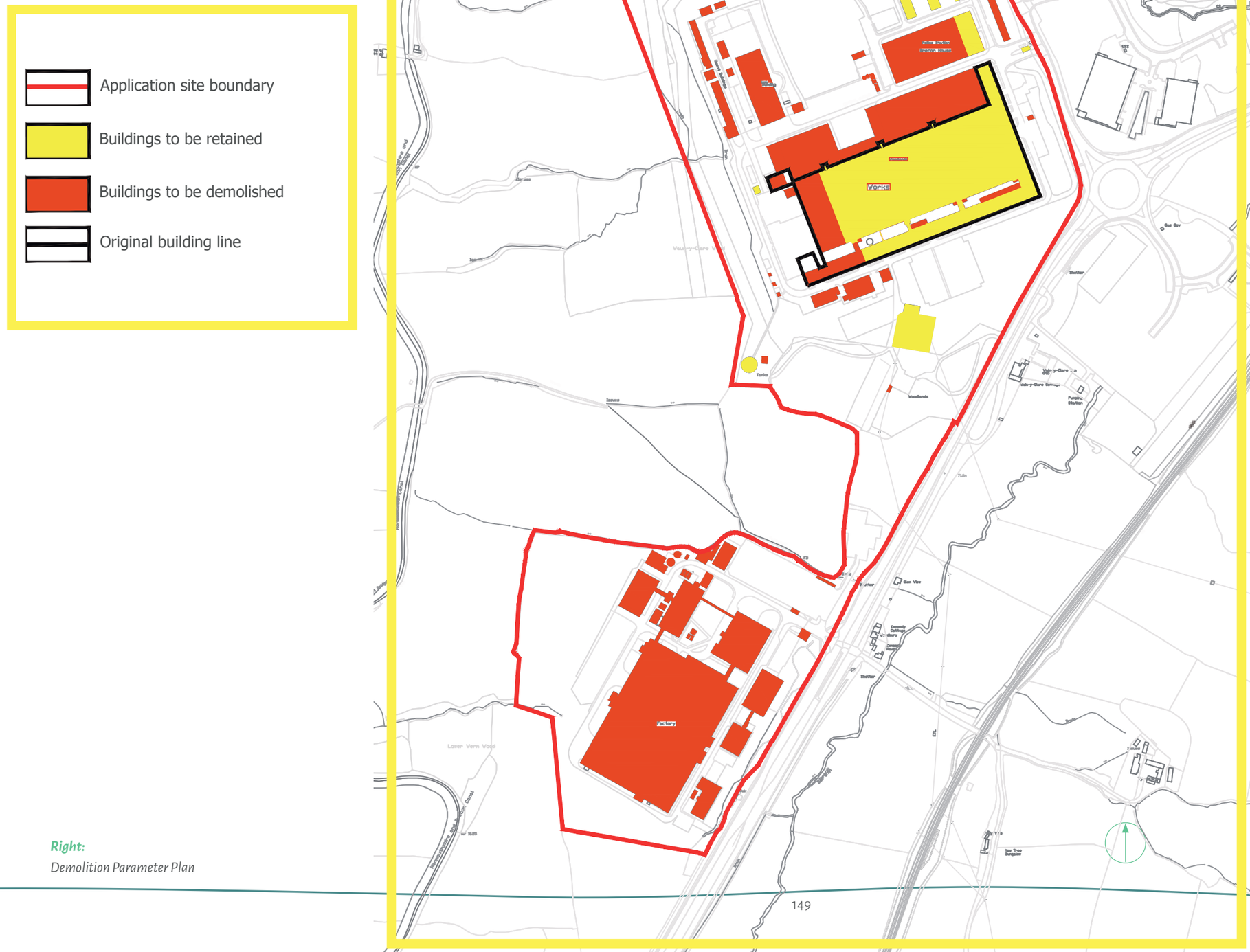
Important trees and planting have been retained and space will be provided around them in the form of green corridors.

Existing watercourses are incorporated into the green infrastructure network.

Right:
Green Infrastructure Parameter Plan

DEMOLITION

The plan opposite shows which buildings will be demolished and which will be retained. A number of the Parke Davis buildings have been demolished to slab level.



Right:
Demolition Parameter Plan

10 ILLUSTRATING THE PRINCIPLES

5.6 ILLUSTRATIVE MASTERPLAN

The following section provides illustrations to demonstrate how the design parameters may be applied in practice to create a high quality masterplan that responds to the site's context. These elements are not fixed, and are for illustrative purposes only.

The purpose of the Illustrative Masterplan is to show how the parameters and principles will provide for the creation of a rich, varied and attractive development comprising a mixture of house types. Variations in density and urban grain will create distinct character areas and edges. The approach to appearance and layout is expanded later in this chapter.

The Illustrative Masterplan shows how existing landscape features will become focal points within the new village, reflecting the characteristics of existing areas nearby. This will make a significant contribution to the character of the development.

The key elements of the Masterplan, shown opposite, include:

1. *Vehicle access with distinctive gateway feature*
2. *Pedestrian access in to the site*
3. *Primary movement route*
4. *Healthy Corridor- Recreational green space for walking and cycling*
5. *Former Nylon Spinners Factory*
6. *Caerleon House*
7. *Mamhilad House*
8. *Brecon House*
9. *Monmouth House*
10. *Local Square*
11. *Primary school*
12. *Green link retaining existing woodland*
13. *Green link retaining and enhancing watercourse*
14. *Landscape buffer*
15. *Public open space with children's play area*
16. *Public Open Space with play area and sports field*
17. *Attenuation feature*

Right:
Illustrative Masterplan

5.7 THE BIG MASTERPLAN IDEAS

THE THREE HOUSES

Retention of Caerleon House, Mamhilad House and Brecon House as a key employment area within the new village. The three houses already have a number of local companies and businesses within them which will continue as an important part of the place.

VILLAGE FRONTAGE

A shop window to the new village along the A4042 which will encompass high quality housing integrated with an attractive natural environment including mature planting and existing watercourses.

FACTORY PARK

Located in the heart of the village, this parkland acts as a focal space for the community. A mix of activities include a grassy open space, an equipped play area and attenuation features with ornamental planting.

HEALTHY CORRIDOR

A linear open space meandering north south through the village encouraging people to walk and cycle in a beautiful natural environment. The route connects a series of children's play areas, ancient woodland, watercourses and recreational open spaces.

VILLAGE CENTRE

A vibrant hub to the village with community facilities set around a market square including the primary school, local shops and community hall. The retained Monmouth House is an important part of the village centre and a unique asset hosting many small businesses.

THE GROVE

A tree lined street for pedestrians, cyclists, buses and cars connecting the whole site together. The Grove will serve as an attractive place defined by areas of shared surfacing, planting, public art and lighting.

5.8 LANDSCAPE & ECOLOGY STRATEGY

This strategy aims to minimise the landscape and visual effects of the proposed scheme and wherever possible, deliver further landscape, visual, recreational and ecological benefits. The overall strategy aims to:

- To create an appropriate landscape structure retaining, enhancing and complementing existing valued landscape features, to integrate the proposed development into the surrounding landscape;
- To retain as much vegetation through the site as possible, including the existing woodland structure and vegetation along the site boundaries, to help soften and integrate development within the surrounding landscape.
- To create a structural landscape buffer along the western edge of the site to provide a robust boundary along this more sensitive edge, softening the visual impact of development on views from the west, such as from the canal and National Park;
- To retain and enhance the existing landscaped area (which contains numerous mature trees, such as to the south east of the former Nylon Spinners Factory and incorporate this into the proposed development;
- To maintain a visual connection with the adjacent National Park;
- To use subtle and complementary colours for building materials, which do not provide a stark contrast with the surrounding landscape, allowing built form to recede into the surrounding landscape rather than stand out;

1. *Existing vegetation to be retained where possible to provide a mature boundary to the north.*
2. *Existing vegetation to be enhanced with additional native tree and shrub planting to provide a continuous boundary edge and fill existing gaps.*
3. *Play area linked by footpath and cycle routes.*
4. *Nature trim trail*
5. *Retained woodland.*
6. *Proposed playing pitch provision.*
7. *Existing vegetation to be retained along watercourse where possible.*
8. *Residential spine road with new tree planting.*

Right:
Landscape and Ecology Strategy Plan

- To use natural and locally appropriate materials for external areas, including surfacing, boundary treatments and street furniture that defines character to reflect the semi-rural context of the Site and avoids standardised suburban influences. The character of the green corridors through the Site should be designed to enhance sense of place in the context of the rural setting and National Park;
- To enhance connectivity and access through the Site and with surrounding countryside; and improve connectivity with the Monmouthshire and Brecon Canal;
- To create an attractive setting for the development, which strengthens and maintains the key characteristics of local landscape character, such as tree belts and woodland blocks.
- To enhance the biodiversity of the Site through strengthening and improving the connectivity of existing wildlife corridors around the Site and providing new habitats within the proposed open spaces;
- To create new public open spaces which provide opportunities for formal recreation as well as informal recreation and connection with nature;
- To ensure that ancient woodland and TPOs are retained and appropriately protected during construction in line with BS 5837 (2012);
- To safeguard PRoW 421 9/1 which passes through the Site and to offset Proposed Development from this footpath to help maintain visual character and recreation value of the route. To maintain access during construction or provide an appropriate temporary divergent route; and
- To ensure that substantial SuDS features are incorporated throughout the proposed development and integrated through streetscapes, and public open spaces.

FOLLY SPRINGS

1. *The stream running down from the Folly spring in the west is re-directed through this green corridor to form an integral feature element of the public open space;*
2. *Proposed LEAP play area with proposed tree and ornamental planting to provide setting;*
3. *Proposed LAP;*
4. *Existing woodland to be retained;*
5. *Local Square*
6. *Attenuation pond*
7. *Proposed footpath link Public Right of Way to the west and east of the site.*
8. *Proposed Primary School*
9. *School drop off / Local Centre parking*

WOODLAND WALK

1. *Proposed play area and grass pitch set in retained mature vegetation where possible;*
2. *The Grove: residential spine road with new tree planting;*
3. *Proposed tree belt planting with native tree species, hedgerow and understory shrub planting;*
4. *Existing water tower to form part of a series of heritage features through POS and improving site legibility;*
5. *Existing Ancient Woodland to be retained;*
6. *Woodland path to encourage healthy living and green connections*
7. *Existing woodland to be retained with wildflower planting and pocket areas of native shrub and tree planting to enhance landscape buffer.*

VILLAGE GARDENS

1. *Existing vegetation to be enhanced with additional structure planting to provide a continuous boundary edge and fill existing gaps;*
2. *Proposed green corridor open space with new footpaths, and wildflower planting;*
3. *Green walking routes though new vegetation promoting Healthy Living;*
4. *Proposed LEAP and LAP play area with landform features and proposed tree and ornamental planting to provide setting;*
5. *Existing watercourse enhanced/re-opened with introduction of planting as part of Public Open Space.*
6. *Existing Ancient Woodland to be retained with wildflower planting and pocket areas of native shrub and tree planting to enhance landscape buffer;*
7. *Residential road access with new tree planting;*
8. *Retained green buffer to development edge;*

5.9 ACCESS & MOVEMENT STRATEGY

It has previously been agreed with the highway authorities, Welsh Government and Torfaen Council that the proposed development could be served by a new roundabout from the A4042 between the existing Old Abergavenny Road and Usk Road roundabouts. The new roundabout was to replace the existing left-in/left-out priority junction that serves the Parke Davis site.

The roundabout solution was agreed in 2016 and since that time speed limits along the A4042 have changed and Active Travel has become a greater consideration in policy terms. Following further discussions with Torfaen Borough Council and Welsh Government, surrounding these changes, has led to the revision of the sites access point and the opportunity to introduce a traffic signal-controlled solution at the Parke Davis access with the associated benefits that it brings to highway users and the local community.

The benefits that arise from the change and the introduction of a traffic signal-controlled access junction over the previously agreed roundabout solution are:

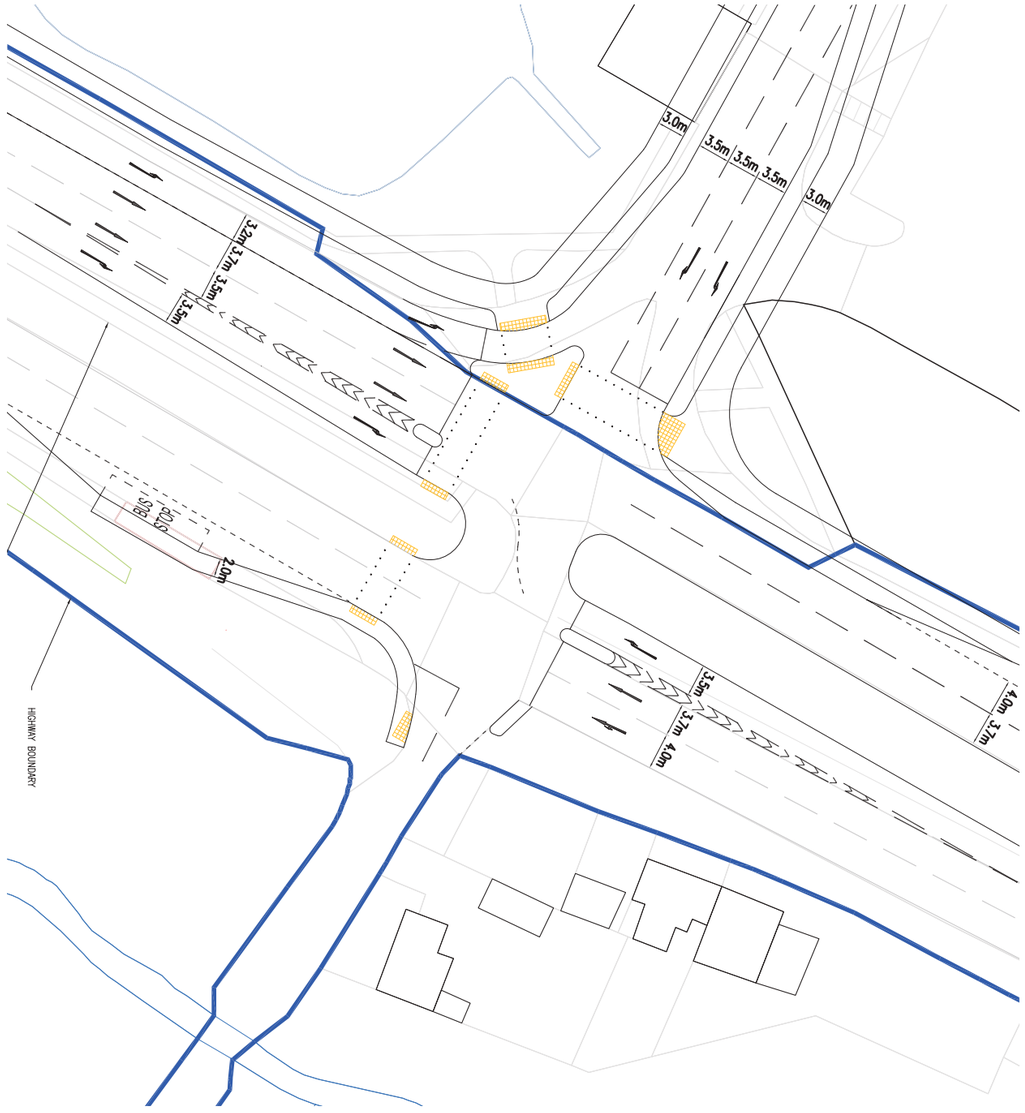
- Improved highway safety – particularly for pedestrians/cyclists;
- Improved accessibility for pedestrians and cyclists – particularly from the community off Pen-Y-Llan Lane;
- Improved vehicle access for the community off Pen-Y-Llan Lane; and
- Reduced noise for local residents in the area.

The principle of a Traffic Signals junction was agreed with the Torfaen Council in the Autumn of 2021. In the short term the Parke Davis site will be served by the existing left-in/ left-out priority junction arrangement.

The existing arrangement is not typical and is not specifically covered by the modern design guidance, however it is existing, and it has been agreed with Welsh Government that the existing design is suitable to access Phase 1 of the proposed development.

The revised masterplan for the proposed development relocates the proposed primary school to the northern end of the site. The school is to be delivered alongside Phase 1 residential development and will include a staff car park, pick-up/drop-off facilities and a safe walking and cycling route for parents/carers and their children. Vehicle access arrangements from the local highway network and internally within Mamhilad Park Estate will be improved to ensure the school operates in a safe and efficient manner, particularly during the Phase 1 construction.

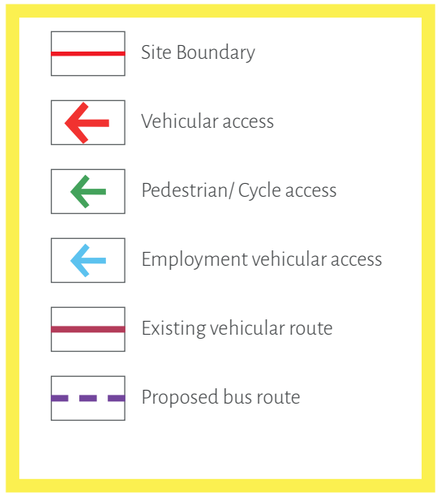
It is therefore proposed that the primary school will be accessed from the existing gated access from Old Abergavenny Road at the northern end of the site, in the interim. The proposed development would then see a new access constructed from Old Abergavenny Road as part of Phase 2 of the development. This new access would be to the south of this existing gated access with the interim northern access becoming closed to vehicular traffic. This proposal has been discussed with highway officers and the principle of this arrangement was agreed in Spring 2022.

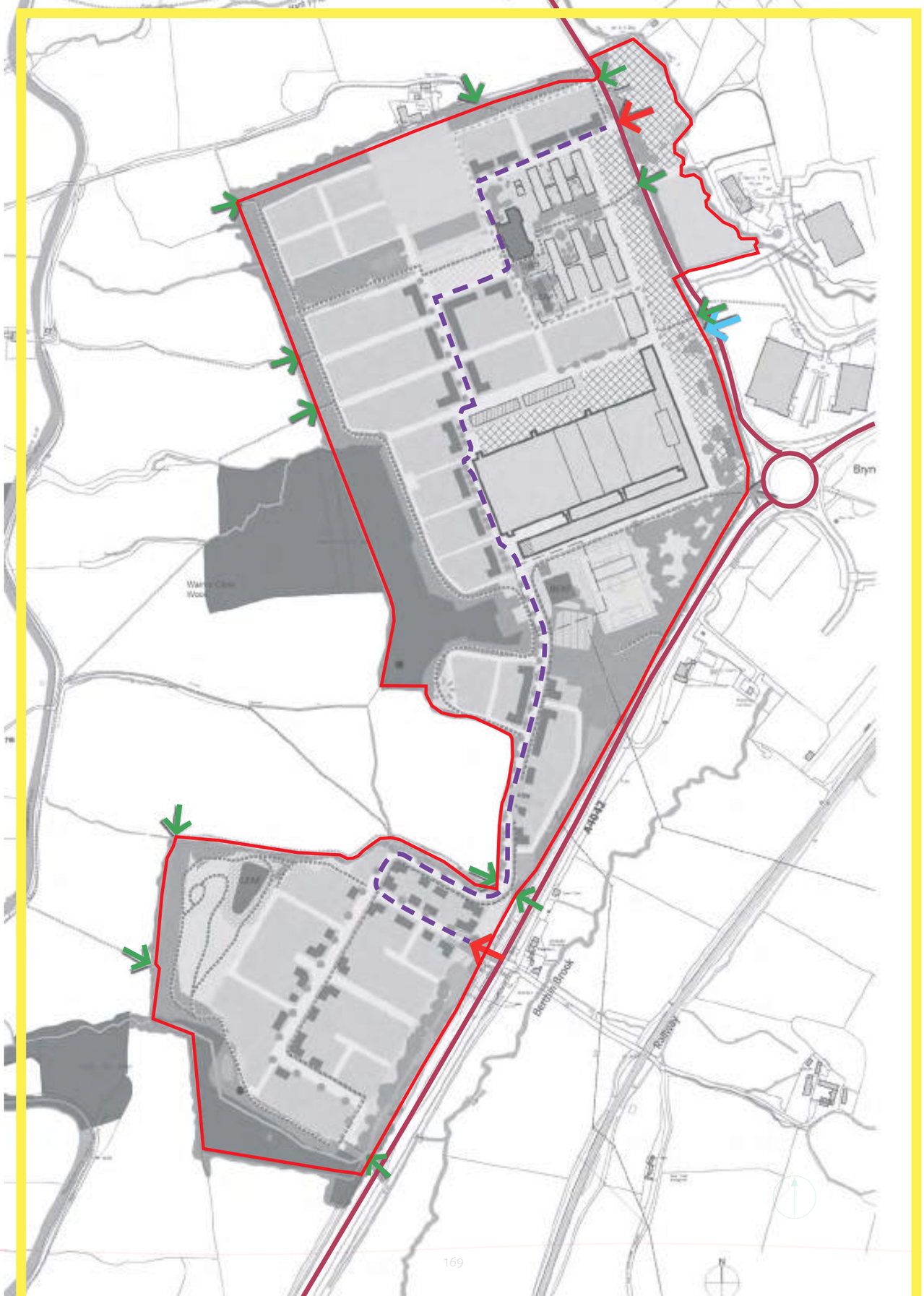


Proposed Old Abergavenny Road priority junction plan

The Parke-Davis and Mamhilad Park Estate sites will be connected by a new internal link road which will allow the movement of buses, service vehicles and private cars. The internal street network in the development will be designed to 20mph and streetscape design will seek to discourage short distance car trips and encourage walking and cycling in the village. 3m wide cycle/footways will be introduced in the busier streets and alongside the internal link road. External walking and cycle links are proposed to the existing A4042 facilities and Old Abergavenny Road. Links to the canal path are also identified.

The development will benefit from a new shuttle bus service that will link the residential and employment areas with Pontypool. The frequency of this service will increase in line with construction and occupation of the development itself. Pedestrian access will be maintained and enhanced to the bus stops along the A4042 serving the existing long distance bus services.





Right:
Access and Movement Strategy Plan

STREET HIERARCHY

The principles for the design of streets set out over the following pages have been prepared to be in accordance with 'Manual for Streets'. The key objective is to create distinctive 'places' that will help to build and strengthen the new community as well as meeting the needs of all users. The streets connect to create a legible and permeable network and the character and the identity of the street types will assist in developing a sense of place as well as enhancing legibility.

Across the site the following design principles apply:

- The creation of a grid of connected streets to facilitate the creation of a 'walkable neighbourhood' where key facilities and spaces are within 400-600m walking distance.
- A network of quiet shared surface community streets will also be provided.
- The design of streets will be integrated with the character area they are within and the built form enclosing them. It may be appropriate for the character of streets to change along their length.
- Measures such as shared surfaces, changes in surface materials, horizontal alignment, lighting and the design of the street should be used as appropriate to encourage slow speeds.
- For each of the street types a description is set out under the headings found in Manual for Streets describing the principal functions of streets (place, movement, access and parking). The elements and objectives of each of these are explained below.

The components of individual street types are explained through the following sub-headings, prepared in accordance with 'Manual for Streets'.

Place

This defines the character and role of the street and the elements that will make it distinctive and/ or characteristic of the local context. The sense of place will be informed by a number of factors including the buildings defining the space, the degree of enclosure, street trees and surface materials.

Movement

These principles explain the movement function of the street in terms of flows and the priority given to different modes of travel and wherever possible and appropriate, pedestrians and cyclists will be given priority.

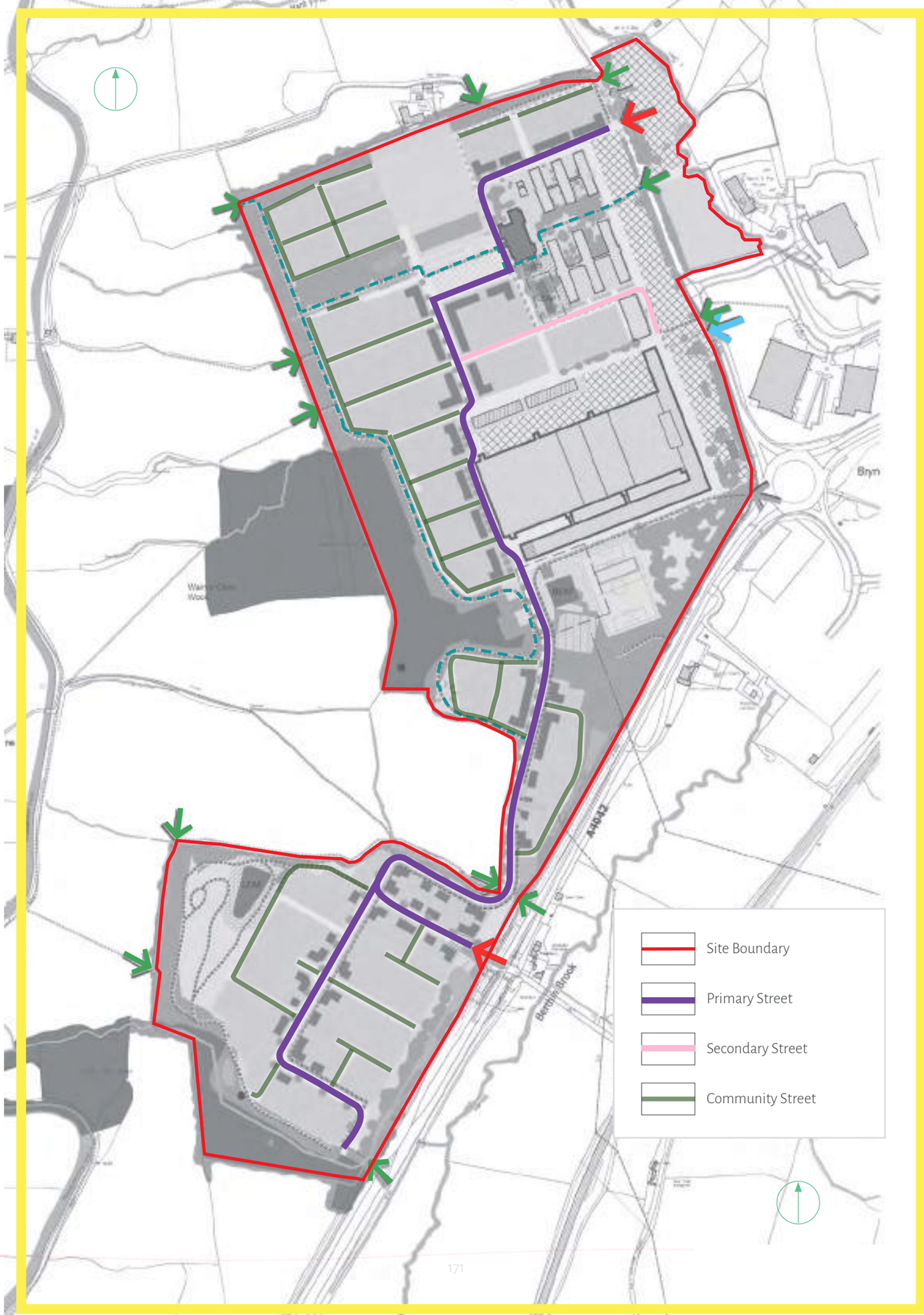
Access

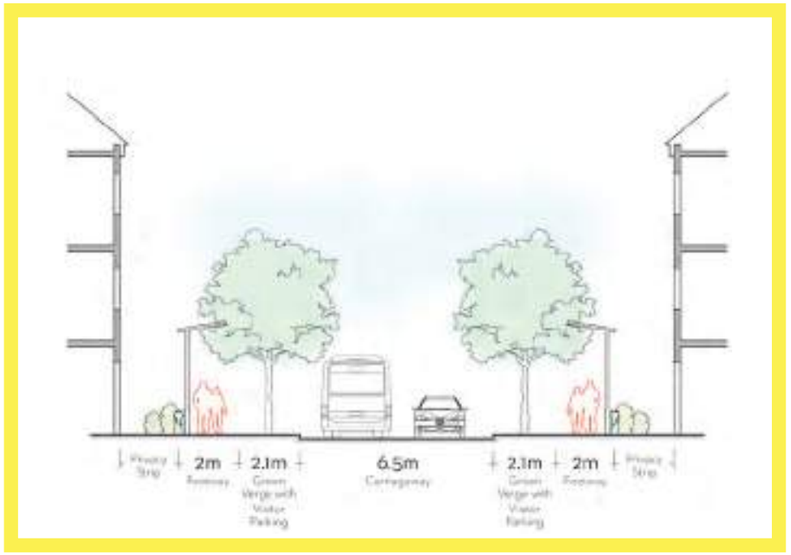
This describes how users will access buildings from the street and, where possible and appropriate, the objective is to provide frontages that are directly and accessible on foot, with vehicle parking close to the main entrance of the property.

Parking

The 'Manual for Streets' describes how parking is a key function of many streets and that a well designed arrangement of on-street parking provides convenient access to frontages and can add vitality to the street. The objective is to provide parking close to the dwelling where appropriate and possible.

Right:
Street Hierarchy Plan





Primary Street

Place

The Primary Street provides a distinctive gateway to the site and forms the spine of the development providing access to secondary and tertiary residential streets. It is defined by 3-4 storey buildings of varied typologies with front gardens to provide enclosure. It is tree-lined on either sigle or both side with a formal character.

Movement

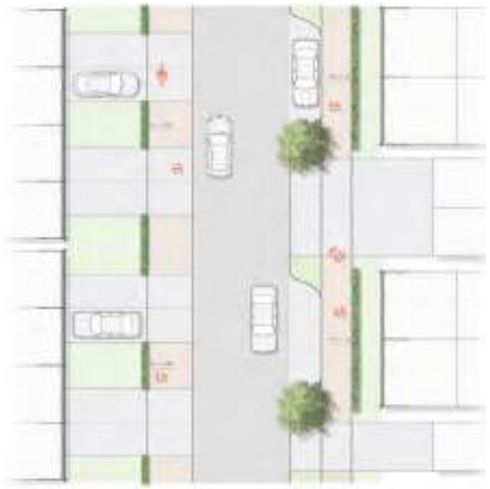
This route is the most efficient route in and out of the site, assisting the creation of a legible street network for residents and visitors. It is the movement network for people, cyclists, buses and private vehicles. There is also a footway on one side of the carriageway and a footway combined with a cycleway on the other side.

Access

This route is accessed via three new access points. A new roundabout will be located off the A4042 in the southeast of the site. In the northeast, two more accesses will be located in the north eastern corner of the site. Key buildings at the entrances will be used to emphasise arrival to the development.

Parking

Parking will be provided on-plot for residents with occasional rear courtyards and some visitor bays included within the street verge at regular intervals.



Primary Street Section

Right:
Primary Street Precedent

Secondary Streets

Place

The Secondary Streets provide a direct route linking housing areas and open spaces to the primary route. They are designed to be functional routes capable of safely accommodating all motorists as well as cyclists and pedestrians. They are fronted by houses of up to 3 storeys with generous sized front gardens.

Movement

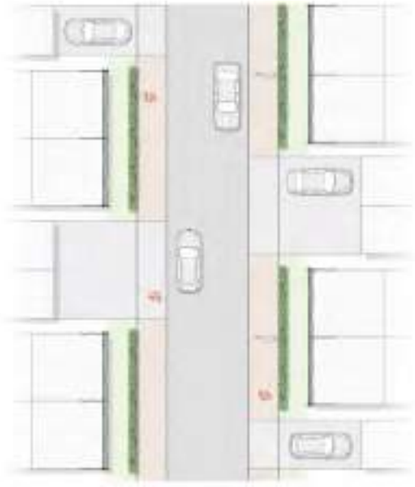
They provide an efficient movement route for bicycles and vehicles, with cyclists using the two-way carriageway.

Access

Direct pedestrian and vehicular access is provided to dwellings.

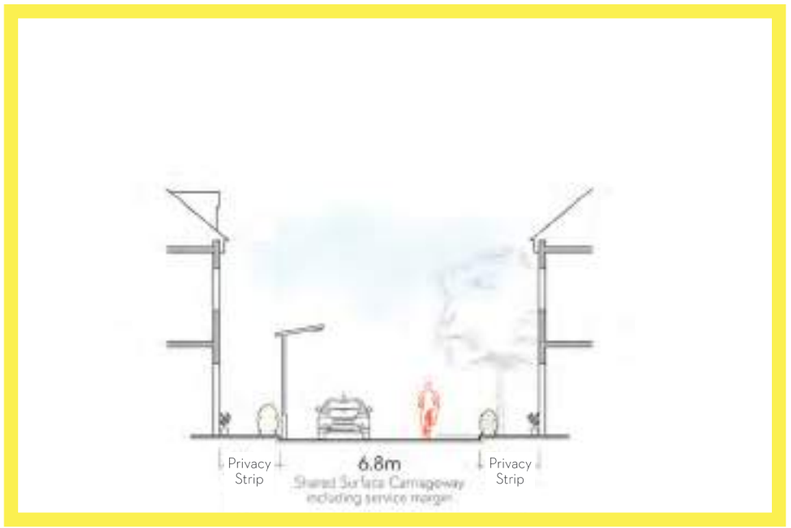
Parking

Most parking is provided on plot to the front or side of properties. Visitor parking will be provided within the carriageway at irregular intervals between access drives.



Secondary Route Street Section

Right:
Secondary Street Precedent



Community Streets

Place

The Community Streets have an informal character, prioritising the movement of cyclists and pedestrians. They are defined by varied building typologies along an inconsistent building line with front gardens and feature shared surfaces. They are intended as an important community place within the development, designed to provide visual interest and safe movement of pedestrians, cyclists, and vehicles.

Movement

They accommodate low traffic flows allowing for safe interaction of people and vehicles, encouraged by the use of shared surface treatments and pedestrian/cyclist priority.

Access

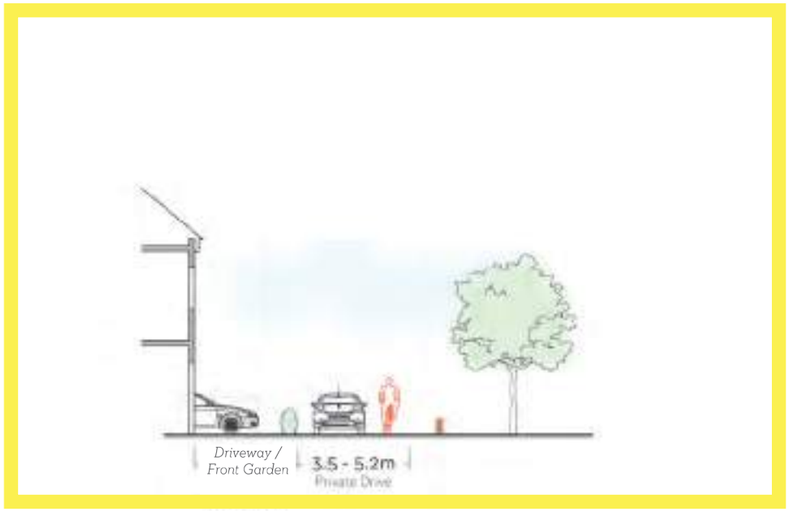
They provide direct access to dwellings.

Parking

Parking for residents and visitors is provided on street and on-plot. On shared surfaced streets, the parking design is integrated with tree planters to ensure the creation of an attractive street scene.

Community Street Section

Right:
Community Street Precedent



Green Lanes

Place

The Green Lanes have an informal character, providing a 'soft' edge to the development along informal and formal public open spaces. They are defined by 2 to 3 storey buildings of predominantly detached and semi-detached dwellings with varied setbacks.

Movement

They are designed exclusively for the dwellings that front them. They will accommodate low traffic levels and have pedestrian/cycle priority.

Access

They are predominantly accessed via the Lanes as the last branch of the street hierarchy. They will provide direct access to dwellings.

Parking

Parking will be provided on-plot.

Green Lane Street Section

Right:
Green Lanes Precedent

5.10 DRAINAGE & WATER MANAGEMENT STRATEGY

The proposed redevelopment provides an exciting opportunity to better manage flood risk compared to the existing situation. The watercourses on site will be integrated into the development as natural features. A minimum stand-off distance of 5-10 m will be provided to maintain the physical and ecological integrity of the watercourses, as well as make space for water. Wide stream corridors will naturally attenuate fluvial flood peaks, as well as canal floodwater in the unlikely event of a canal breach. Design pathways for overland flow will also be created between buildings, with finished floor and site levels set to direct any overland flow away from buildings and into the proposed areas of public open space. In addition, the watercourses will be de-culverted where possible, to reduce the risk of blockage and, hence, flooding, as well as provide valuable wetland and aquatic habitat.

Conversion of the site from its existing industrial use to primarily residential will reduce total impervious surface coverage. This, in turn, will afford a reduction in surface water flood risk, both to the site itself and to third parties downstream. Surface water runoff from roofs, yards and highways on the redeveloped site will be conveyed via gravity-piped systems to discharge either to soakaways (where ground conditions allow) or to attenuation storage systems with flow control. Wherever possible, innovative soft-engineered SuDS, providing above-ground water treatment as well as runoff control, will be strived for.

5.11 SUSTAINABILITY STRATEGY

It is recognised that the built environment is responsible for a substantial proportion of the UK's greenhouse gas emissions with a consequent impact on climate change. With this in mind, the scheme is set to achieve appropriate environmental standards.

ENERGY

Any future developer should design the dwellings with efficient U values, heating and lighting systems. This will reflect in the SAP calculations which will seek to demonstrate a minimum overall 37% energy efficiency for each dwelling when compared with current (June, 2022) Building Regulation standards.

All internal lighting will be provided from dedicated low energy fittings.

All external space and security lighting will be provided from dedicated low energy fittings and be controlled by movement detectors and daylight cut-off sensors.

WATER

All water fittings within the new houses will be specified low water use to minimise potable water use during operation. Predicted average household water consumption is calculated not to exceed 110 litres/per person/day.

Site water usage will be monitored throughout the construction process via a designated site operative and targets will be set via DTI's KPI targets to reduce water use where possible. Site procedures will be in place to ensure that water pollution is minimised during the construction of the project.

MATERIALS

Any future developer should operate responsible sourcing policies in respect of materials used for construction and temporary works. All materials will be specified to be responsibly sourced where possible and form legal and sustainable sources.

The use of suppliers that operate environmental management systems and ISO14001 certification will be encouraged and this will form part of the contractor's commitment to this project. In addition, all timber used will be legally and responsibly sourced from FSC (Forest Stewardship Council) or similar certified sources. It is understood that resources for any construction project are only as sustainable as the location they are provided from. Therefore, all materials will be locally resourced where possible to minimise the environmental impact with regard to transport related CO2 emissions.

It is anticipated that the construction systems will score an average rating of A on the Green Guide ratings systems for sustainability. In addition, the architect will ensure that all insulation specified will have low GWP (Global Warming Potential) and zero ODP (Ozone Depletion Potential).

WASTE

Any future developer will operate an environmental management policy and will also, as a mandatory requirement, provide a SWMP (Site Waste Management Plan) detailing the strategy for minimising or avoiding the use of landfill and maximising opportunities for recycling by sorting waste streams. The developer's SWMP procedures should be successful in diverting up to 85% of site waste away from landfill sites.

It is anticipated that the local authority will provide a kerbside collection recycling scheme for the dwellings once occupied. All dwellings will also be provided with a home composter unit in the rear garden to encourage recycling of food and garden waste.

HEALTH & WELL-BEING

The proposed development will endeavour to achieve a minimum Daylight Factor of 2% in the kitchen areas and 1.5% in the lounge and dining areas of each dwelling. In additional to reducing the need for artificial lighting and in some cases contributing to winter heating requirements, research has shown that the main impact of good daylighting design is on human beings. Adequate access to daylight will contribute to the health and well-being of the occupants by providing them with a pleasant living environment.

One room in each dwelling will also be configured to provide a dual purpose role as a 'Home Office' to encourage working from home. Suitable levels of natural light and ventilation, as well as adequate space and provision of power and IT connections will be incorporated into each Home Office space.

the dwellings may be used inappropriately, leading to the dissatisfaction of occupants and the waste of resources.

MANAGEMENT

Any future developer will be required to meet best practice levels and achieve a minimum 3 points in each assessed category. This will help ensure that the site is managed in an environmentally, socially considerate and accountable manner.

In addition, any future contractor will be required to ensure that all resources including energy on site, water, pollution, and energy off site, will be monitored and minimised where possible to current DTI 'best practice' targets. This requirement will be written into the specification.

The contractor will operate an environmental materials policy for sourcing of construction products.

A comprehensive non-technical building user guide will be produced to encourage occupants to understand and operate their home efficiently and make the best use of local facilities. Without provision of adequate information and guidance the dwellings may be used inappropriately, leading to the dissatisfaction of occupants and the waste of resources.

LOW CARBON DESIGN

We will seek to achieve methods to reduce energy demand and increase energy efficiency. The design will implement an energy hierarchy to promote a basis of good fabric design, complemented by energy efficiency measures and an appropriate use of renewable technologies, if required.

Reduction in energy demand is recognised as being the first measure to reduce CO2 emissions under the Energy Hierarchy. Methods adopted in the dwellings proposed for this scheme include:

Highly insulated building fabric elements and high performance glazing, providing the following U-values:

» External Wall = 0.22Wm2°K

» Ground Floor = 0.17Wm2°K

» Roof = 0.11Wm2°K

» Solid Doors = 1.10Wm2°K

These values are significantly better than current limits stipulated under the Building Regulations, and will help to reduce the initial heating demands of the dwellings.

Reduction of heat loss via non-repeating thermal bridging elements such as lintels, door jambs, junctions etc, by incorporation of Accredited Construction Details for Thermal Bridging & Air Tightness into the design and construction of each dwelling type.

Low levels of infiltration (uncontrolled ventilation), achieving a measured air permeability of less than 5m3hrm2 at 50Pa.

The use of SEDBUK band A gas fired condensing combi-boilers coupled with flue gas heat recovery units will provide energy efficient space heating to each dwelling. Central heating programmers, room thermostats and thermostatic radiator valves will be the minimum controls provision, with enhanced time and temperature zone heating controls employed where additional energy efficiency measures are required.

The high standard of fabric thermal performance, coupled with energy efficient gas boilers, enhanced space heating and hot water controls, low energy fans and 100% low energy lighting avoids the need for any renewable energy source to reach the required energy efficiency standard.

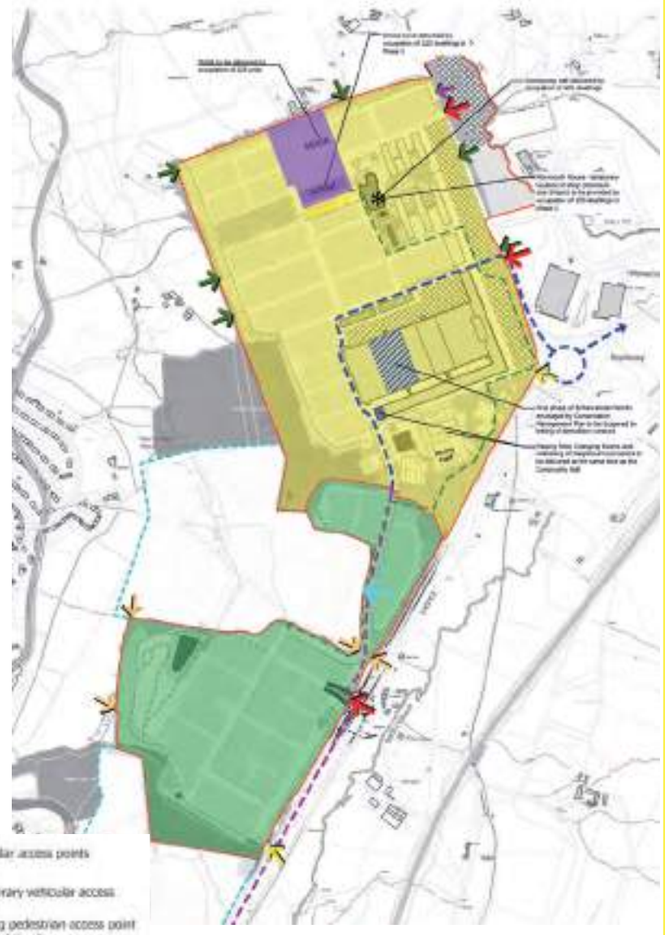
Right:
Precedent

DEVELOPMENT PHASING

The Phasing Plan accompanying this Statement shows the overall Mamhilad Strategic Action Area although the current application relates, in the main, to the brownfield elements of the strategic allocation and to land which is within the ownership of JE (Phases 1 and 2).

The application site extends to 51.51 hectares and includes two main phases of development for the JE land. Phase 1 is shaded green on the Phasing Plan and Phase 2 is shaded yellow. The proposed primary school and associated facilities are shaded purple and will be delivered as part of Phase 1.

Importantly, however, the proposals allow for the future development of the remaining 23 hectares of the Mamhilad Strategic Action Area which lie outside the current application site. This land is denoted by dashed blue lines on the Phasing Plan.



Phasing Plan

PHASE 1

In terms of delivery, the first phase of development will be the redevelopment of the former Parke-Davis site. This part of the Mamhilad Strategic Action Area is expected to deliver between 295 and 393 dwellings over the next four to five years. As mentioned above, a primary school and Multi-Use Games Area (MUGA) will also be provided (on Phase 2 land) as part of Phase 1.

Phase 1 will include the following:

- Provision of a traffic signalled junction on the A4042 to form the site access – this will be provided at the start of Phase 1.
- Provision of a link road within Phase 1 to the boundary of the Phase 2 development area. During Phase 1 a temporary pedestrian/cycle route will also be provided so the occupiers of the dwellings in Phase 1 can easily access the primary school.
- The provision of serviced land suitable for the construction of a new 1.5-form entry primary school - JE will provide a 1-form entry school by the occupation of the 225th dwelling on Phase 1.
- Provision of the MUGA – this will be provided by the occupation of the 300th dwelling on Phase 1.
- The provision of informal open space as envisaged by the application.
- The provision of aLocal Equipped Area of Play (LEAP).
- The provision of a bat bungalow – the bat bungalow on Phase 1 will be provided prior to the demolition of the remaining Parke-Davis office.
- Affordable Housing - 15% affordable housing will be developed as part of both the Phase 1 and Phase 2 schemes.
- Temporary convenience retail facility – a small facility (minimum size 50sqm) will be provided within Monmouth House before the occupation of the 125 dwelling on Phase 1.
- Phase 1 will also include payments towards infrastructure as follows (some of which will continue into Phase 2):
- Bus Subsidy, Tranaport Contribution, School Transportation annual contribution in accordance with the S106 agreement.

PHASE 2

Phase 2 will follow Phase 1 and will involve the redevelopment of the Mamhilad Park Estate area of the site in order to deliver between 412 and 533 dwellings and new office space.

Phase 2 will include the following:

- Completion of the remainder of the link road between the Phase 1 and Phase 2 areas.
- The provision of a 6,000 sq ft community hall within Monmouth House – this will be provided upon occupation of the 450th dwelling overall.
- The provision of the Neighbourhood Centre – this will take place at the same time that the community hall is delivered.
- The provision of informal open space as envisaged by the application.
- The provision of a Local Area of Play (LAP).
- The provision of a Local Equipped Area of Play (LEAP).
- The provision of a Neighbourhood Equipped Area of Play (NEAP).
- The provision of a playing field and changing facilities – these will be provided at the same time that the community hall is delivered.
- The provision of a bat bungalow.
- Affordable Housing - 15% affordable housing will be developed as part of both the Phase 1 and Phase 2 schemes.
- Phase 2 will also include payments towards infrastructure as follows:
- Transport Contribution in accordance with S106 agreement.

5.12 CHARACTER AREAS

The following pages identify a number of character areas across Mamhilad. The illustrative layout, sections and street scenes aim to demonstrate the difference in character and the influence of the context assessments set out earlier in the DAS.

Development at Mamhilad will comprise three main character areas that broadly aim to establish an urban or suburban character within the site. They are the central character area, the northern character area and the southern character area and their locations are shown on the plan opposite.

APPROACH TO CHARACTER AREAS

The rationale for determining the location of each character area is based on an analysis of the site and surrounding villages as well as the vision to create a successful synergy between the development and the countryside.

To help identify the character elements seven headings have been established:

- Key Proposals
- Character Drivers
- Access and Parking
- Layout
- Landscape and Public Realm
- Scale and Density
- Appearance

These headings aim to illustrate the proposals drawing on relevant landscape characteristics of the site, the character of existing buildings being retained on the site and surrounding villages.

Section 4.6 in this document demonstrated that the existing local villages are very diverse, influenced by their purpose and inextricably linked with the economic drivers of the nearby areas. The new development at Mamhilad could offer another diverse element to this group as a new destination point with its own identity.

Precedents of recent developments in the UK will also be included to offer exemplary ideas for the character areas. These precedents are a starting point for the design, and cannot be exhaustive, but nonetheless offer contemporary ideas for a place that looks to be a destination.

The character areas have been formed with this approach in mind and are illustrated on the following pages accompanied by a number of images.

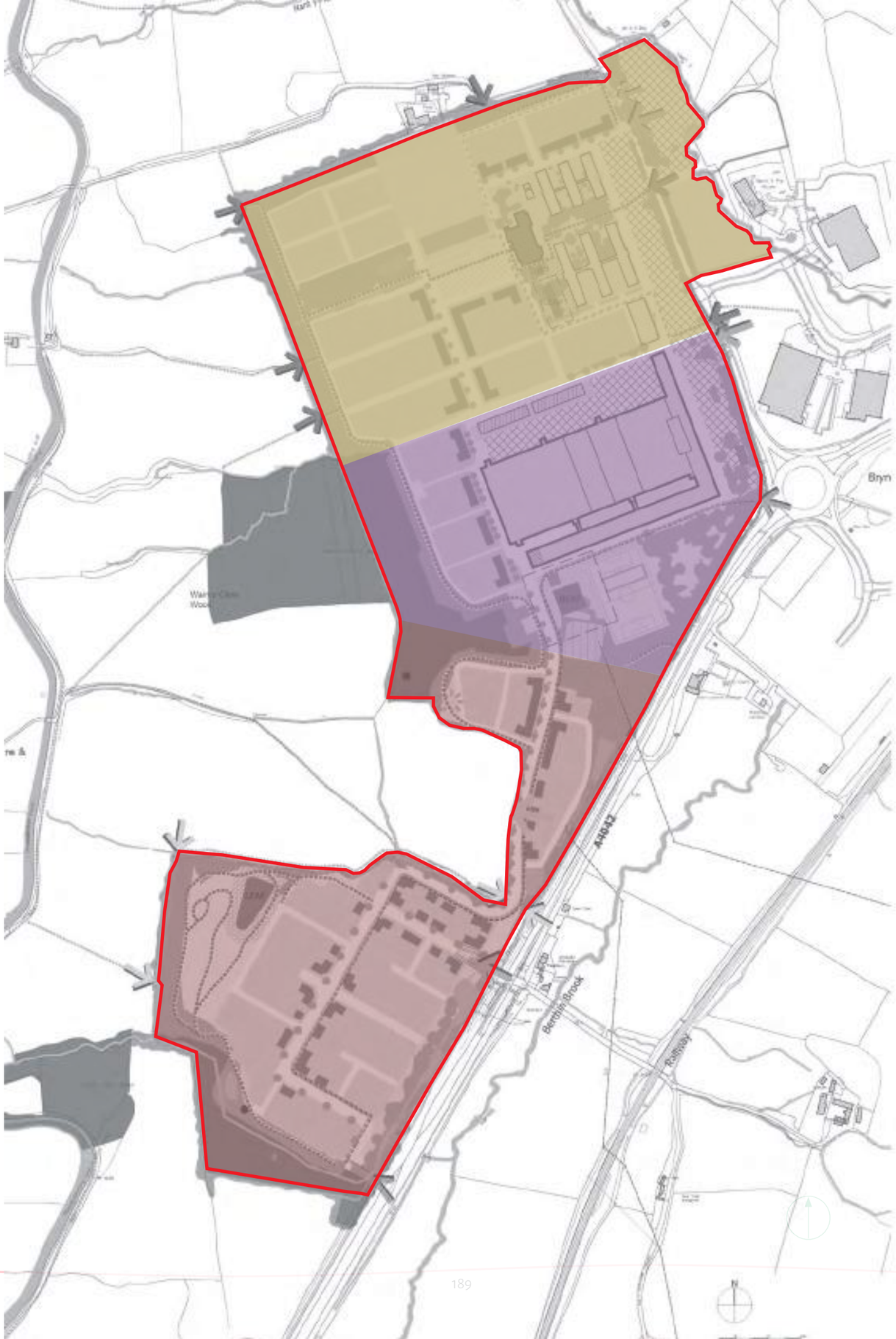
Site Boundary

Northern Character Area

Central Character Area

Southern Character Area

Right:
Character Areas plan



1 - CENTRAL CHARACTER AREA

The Central Area comprises employment in the retained listed factory building which will be linked to the community hub to the north. Together with residential dwellings, these buildings are designed to reflect the industrial style of the past while looking to the future. They are located around a vibrant public realm.

Key Proposals

1. *Employment retained within listed building*
2. *Residential*
3. *Car park/ Services*
4. *Retained Ancient Woodland*
5. *Primary Movement Route*
6. *NEAP Play area*
7. *Sport pitch*

Character Drivers

» Listed building
» Rectilinear layout of factory building and the curtilage buildings
» Flat topography
» Woodland edge

Layout

At the centre of this character area is the retained factory building containing employment and housing. The primary route passes to the west of the former Nylon Spinners Factory linking the northern and southern areas of the site.

The location of uses distributed along the main route creates a lively central focus as seen in the local villages of Usk and Raglan.

Illustrative Layout

Access and Parking

Access is via the primary street which runs through the development. These routes also provide a bus service. The primary street is designed to be pedestrian friendly through the centre of Mamhilad creating a pleasant environment in which to walk around. This reflects similar access in the local villages of Raglan and Penperlleni. Residential parking is provided on plot. Large areas of parking are provided in the employment areas.

Landscape and Public Realm

This character area features a key public space,with sports pitch and play area. It is designed as an adaptable space to be used by the community. Existing dense woodland along the western edge is enhanced to provide soft natural edges and screening to the development.

Scale and Density

A mix of apartments and terrace housing is proposed which are up to 4 storeys high and located around the retained factory building. The density is 40-50 dwellings per hectare. With taller and denser development in the centre and lower density at the development edges, a positive relationship with the surrounding countryside is created. A similar spread of densities is evident in the local village of Usk.

Appearance

The area will have a formal and urban character. As the retained factory building is a landmark building, proposed buildings will reflect the industrial aesthetic. The scale of the factory is toned down and converted to a domestic scale with a contemporary use of brick. Focal buildings are located around the square to aid legibility and define high quality, attractive streets and spaces.

Local character reference

Exemplar Images

Illustrative View and Illustrative Elevation

2 – NORTHERN CHARACTER AREA

The Northern Area comprises the community hub - the Neighbourhood Centre within the retained Monmouth House -for the whole development - and residential uses with some employment in the retained buildings at Mamhilad House, Caerleon House and Brecon House. As with the central character area these buildings are designed to reflect the industrial aesthetic in a rectilinear urban form. They are arranged around informal richly planted open spaces and are enclosed by dense vegetation which edges the site.

Key Proposals

1. *Residential*
2. *Employment in the existing office blocks*
3. *Public open space*
4. *Local Square*
5. *Neighbourhood Centre within retained Monmouth House*
6. *Watercourse*
7. *Landscape Buffer*
8. *Primary Movement Route*
9. *Primary school*
10. *School drop-off parking and Local Centre parking*

Character Drivers

» Rectilinear layout of factory building and the curtilage buildings
» Flat topography
» Watercourses
» Woodland edge

Layout

The rectilinear urban form is structured around a regular grid pattern. The orthogonal character of this neighbourhood is designed to reflect the existing factory layout, incorporating the existing employment buildings in the northeast. Long, straight streets create a grid with a hierarchy defined by avenue tree planting. Buildings are arranged to face public spaces and main streets taking account of existing planting. The location of uses distributed along the main route and around the square creates a lively central focus as seen in the local villages of Usk and Raglan.

Access and Parking

Access is via the primary route which runs through the development and links to Old Abergavenny Road in the northeast and leads to the Listed Building in the southwest. The bus route follows these routes looping round this character area. A Secondary Street and Community Streets lead off the primary route to access residential areas. A mix of on plot car parking and front and rear parking courtyards is proposed as well as a car park for employment uses.

Landscape and Public Realm

A green corridor running east west across this area links to the neighbourhood centre, green open spaces and existing countryside via the Local Square Watercourses, existing and new planting as well as children's play areas and a pedestrian and cycleway feature along the route. The distribution of small open spaces along the primary route lessens the dominance of traffic and provides an attractive street scene as seen in the local village of Raglan. The straight streets offer striking views of the Brecon Beacons to the west.

Scale and Density

A mix of apartments, terraces and semi-detached dwellings are proposed up to 3 storeys high. The density is 40 to 50 dwellings per hectare.

Appearance

The area will have a formal, suburban character. As with the central character area, buildings will reflect the industrial aesthetic with a common use of brick frontages and slate roofs.

Local character references

Exemplar images

Illustrative View and Illustrative Elevation

3 - SOUTHERN CHARACTER AREA

The southern area comprises informal residential blocks which are structured around open spaces and retained site features.

Key Proposals

1. *Residential*
2. *Healthy Corridor - recreational open space for walking and cycling*
3. *Children's Play Space*
4. *Attenuation ponds*
5. *Watercourse*
6. *Vehicle access point with gateway feature*
7. *Retained Ancient Woodland*

Character Drivers

» Natural watercourses
» Organic landform and flowing topography
» Prominent high point on the site
» Significant woodland
» Countryside edge

Layout

The character of this area takes its queue from the layout of the former Parke Davis buildings. The more rural character takes over towards the north west. The secondary street, running east west, is designed to provide views to the Brecon Beacons beyond.

Access and Parking

Access is via the primary route which runs through the development linking to the A4042 to the east and the Neighbourhood Centre to the north. A secondary street and community streets lead off the primary route to access residential areas. The bus route crosses the neighbourhood along the primary route and exits on to the A4042. Parking is located on plot or on street.

Landscape and Public Realm

A meandering green corridor with a pedestrian and cycle route runs north south on the perimeter of this character area. This green space accomodates children play area and attractive woodland walk route. Further green spaces edge this area along the A4042, that provides screening and noise mitigation. Feature existing natural watercourses and existing and new planting link to the surrounding landscape.

Scale and Density

A mix of semi-detached and detached dwellings with some apartment buildings are proposed up to 3 storeys high. The density is 30 to 40 dwellings per hectare.

Appearance

The area has a suburban and more informal character with rural edges in the west. Materials will be a mix of brick and render.

Exemplar images

Local character references

Examplar Illustrative View

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