Context and key drivers

....

15

SUS

2.1/ Current policy objectives

development.

the following pages:

Affordability

Development

Strategies and policies operative at national, regional and local scale will

continue to shape development and

regeneration activity in and around

Penrith. The strategic masterplan is

these, demonstrating strategic alignment

and a holistic approach to sustainable

Key objectives fall under the following

broad policy drivers, as explored over

Housing, Housing Need and

· Regeneration and Economic

based on a clear understanding of

The strategic masterplan acknowledges and responds to a wide range of contextual factors that represent both constraints to and opportunities for growth and development. Planning for significant scale of change demands that a wide range of existing and potential issues be appreciated, and that appropriate response to these be embedded in the plan.

Extensive baseline research has been produced to identify the key drivers behind the plan. These are summarised as;

- 2.1 Current policy objectives
- 2.2 Property market trends
- 2.3 Quality of place
- 2.4 Environmental constraints
- 2.5 Movement and transport

Key issues and objectives in respect of these policy drivers are identified in the following key documents, which developers are urged to research when preparing proposals.

- Local Investment Plan for Cumbria 2010 / 2011(Cumbria Coordination Group/Homes and Communities Agency 2010)
- Eden District Council adopted Core Strategy DPD (2010)
- Eden District Council Housing Development Plan Document: Issues and Options Paper (2007), and Housing Development Plan Document: Issues and Options, Alternative Sites Consultation (2008)

- Eden District Council Strategic Housing Land Availability Assessment (2009) (SHLAA)
- Eden District Council Five Year Supply of Deliverable Land (SHLAA Update) (2010)
- Annual Monitoring Data 2009-2010

 Eden District Council (2010)
- Cumbria Housing Strategy 2006/2011
- Strategic Housing Market Assessment: Eden Valley North Housing Market Area – Cumbria Sub-Regional Housing Group (2009) (SHMA)
- Penrith Housing Study Penrith Partnership (2006)
- The Penrith Masterplan Penrith Partnership (2007)
- Employment Land Study Eden District Council (2009)

2.1.1/ Housing, Housing Need and Affordability

The Local Investment Plan (LIP) for Cumbria is based on the vision of;

"Building on the county's attractiveness as a place to live, work and visit; the delivery of a range of innovative and sustainable projects will secure a better quality of life for current and future generations. Cumbria will work towards balanced housing markets which support the social and economic changes that the county will undergo over the next twenty years."

The LIP identifies that Cumbria needs an increased supply of high quality open market and affordable housing to attract and retain those with the skills to support economic growth.

Housing need is embedded in the

Council's Core Strategy (CS), and reflects EDC's commitment to the housing target numbers set out in the now revoked RSS. Policy CS2 – Locational Strategy states that Penrith is the Key Service Centre for Eden and will be the focus for large scale development, town centre regeneration, new housing and strategic employment sites. Accordingly, Penrith is set to accommodate 60 percent of Eden's total housing growth through to 2025. This equates to a need to provide 2600 new homes in Penrith within the plan period, at a rate of 164 dwellings/pa.

Policy CS10 Affordable Housing sets a minimum target of 92 new affordable dwellings/pa, requiring 30 percent of homes on each new development be affordable. This is seen as comprising 83:17 split between social rented housing and intermediate designation. Local occupancy clauses should be attached to affordable homes.

The CS accepts that meeting these targets will require significant

development on greenfield sites around Penrith. While both the SHLAA and Housing DPD issues and options papers suggest that sufficient housing land would be available, a key challenge is the rate of delivery, as past completion rates have not achieved 164 dwellings/ pa.

Indeed, other studies suggest that even higher targets are required, notably the SHMA which indicates an average annual requirement for 337 market-led dwellings/pa and 83 affordable dwellings/pa. The SHMA suggests an additional 844 market-led properties (182 affordable properties) are also needed to address previous shortfalls.

Affordable housing is a major issue in Eden. As one of four sub-regional Vision Boards 'Eden and South Lakeland Forward' has developed a strategic programme of investment, a key theme of which is the provision of Affordable Housing on the basis of a recognised shortage. The Cumbria Housing Executive Group has a strong evidence base on the County's housing market. Key concerns and issues arising - identified in the LIP – include the growth in house prices by 90 percent seen in the period 2002-2007 (prices in Eden and South Lakeland are amongst the highest in the North West of England). High prices combined with low incomes produce unbalanced house price to income ratios, and severe affordability problems.

The SHMA reiterates the affordability gap - house prices being recorded at seven times median income and nine times lower quartile income in 2007, and entry level properties are £43,000 more expensive in Eden Valley North than County averages.

2.1.2/ Regeneration and Economic Development

The Core Strategy, reflecting the

district-wide Employment Land Study, and the principle of 60 percent of development being directed to Penrith, promotes a target of 30 hectares of land supply provision through to 2025. However, there is limited scope as to where such supply could be delivered in Penrith and thus Eden Business Park is seen as critical to meeting the target.

Penrith's role as an employment centre reflects two particular aspects. Firstly its function as a key service centre for a wide rural hinterland. Secondly, its geographic location at the intersection of three major road routes (M6/A66/A6) and its access to the West Coast mainline railway.

The distribution and logistics industry sector is therefore very important to the local economy, as is public sector employment associated with health and emergency services; education and public agencies.

There is policy support for the growth of the University of Cumbria's site at Newton Rigg, including the development of complementary uses and the growth of knowledge based industries. Retail developments, appropriate to Penrith's role as the dominant retail centre of the District will also be supported.

The Penrith Masterplan (2007)

The Penrith Masterplan was produced as an initiative by the Penrith Partnership to provide a robust but flexible blueprint for the future development of the town including its adjacent attractions and amenities. The Masterplan sets out a "preferred spatial approach" to town centre development and intends to provide the context for the preparation of more detailed development briefs.

The Masterplan finds that Penrith has a strong identity as a historic market town and rural service centre, offering a range of independent businesses and facilities for residents and visitors. Future challenges include;

- The movement of the town's 'centre of gravity' to the south as the New Squares development is brought forward
- The need for mixed-use investment in the north to counteract this
- Increased diversity and quality of better paid employment opportunities
- Encouragement of independent businesses to collaborate and work

together more effectively

 Promotion of well designed and compatible new development on key sites

The Masterplan includes development briefs for four key Town Centre areas. One of these is Ullswater Road. The Masterplan notes that the west side of Ullswater Road is an established mixed-use area. Priority should be given to improving the quality of the buildings and creating higher value business, leisure or service uses in this area. Poor quality industrial or open storage uses should be discouraged.



2.2/ Property market trends

Marketing intelligence has been gathered regarding supply, demand, need, and market drivers. This has included discussion with twenty four regional and local stakeholders, many of whom have been consulted via face-toface meetings.

This has included consultation with Cumbria Vision about the Local Investment Plan, along with many of the Housing Market Partnership members including four private housebuilders and four housing associations. The house builders include those with proposed schemes in Penrith as well as others who see the town as a new investment opportunity. Eleven property agents have been consulted about the local housing, employment, retail and leisure markets. Details of individual consultations are included in the baseline documents.

Market research has been balanced against socio-economic review: a range of indicators have been identified that illustrate the characteristics of Penrith's population and property market. These cover the demographics of the population, economic activity, educational attainment, deprivation and commuting.

These statistics have been compared with district-wide, regional and national figures to enable fuller comparison (although many ward level indicators are only available from the 2001 Census). The population of Penrith for the purposes of this analysis is 14,710.

2.2.1/ The market: housing

In overall terms there is good demand, and private housebuilders and Housing Associations alike are confident about Penrith as an investment location. All of the eight housebuilders / Housing Associations contacted either have current proposals for the town, or would wish to develop properties in the future.

Demand is however seen as being very much local – first time buyers; people moving up the property ladder; older people wishing to downsize. Property sector stakeholders outline that the main housing demand is for two/three-bed terraces, semi-detached or bungalow properties. Demand is from local first time buyers, people moving up the property ladder and older people wishing to downsize. The demand for flats is considered to be low, although some new build apartment schemes report reasonable rates of sale.

The demand for affordable housing is well documented and reflected in policy objectives, however a further nuance in the local market is the difference between values in different parts of the town. In short, there is a differential in values between north and east Penrith; estimated to be around 10 percent for comparable 3-bedroom semi-detached properties. The average price for such a property in the east of the town is - at the time of study - around £200,000.

The town also has a strong rental market, driven by affordability issues. Again requirements are for family properties (houses and flats), from local people. In terms of housing need, this overwhelmingly relates to family homes. The current housing waiting list is understood to extend to over 1200 applications. Stakeholder discussions suggest there may be a challenge of the identified sites delivering the capacity figures suggested by the SHLAA and Economic Viability Assessment. This is illustrated at Carleton Fields (option area 4) where the SHLAA suggests potential for in excess of 800 units, but developer interests estimate that the number is likely to be far less (possibly over 25% less) on the basis of site feasibility studies. Housebuilder aspirations generally seem geared towards lower density schemes, and a low level of annual delivery.

Also, whilst the principle of 30 percent affordable housing (as required under CS Policy CS10) is generally accepted, concerns are that the 83:17 split in favour of social rented housing could impact negatively on development. This relates to the perceptions of open market buyers, impact on development values and concerns about registered providers lacking funds to purchase the affordable housing element. Developer preference is therefore for discounted sales tied to deeds and local

purchasers.

2.2.2/ The market: employment and commercial space

The supply of industrial premises is focused at Gilwilly and Penrith Industrial Estates, as well as Skirsgill Business Park. Offices are also available in these schemes, with good quality suites available at Redhills and Penrith 40 Business Parks. There is a reasonable supply of available units, in a range of sizes, including some warehouse properties.

The quality of office and industrial space is generally moderate and most schemes are well occupied. There does not seem to be an issue with a surplus of low quality space.

Demand is for industrial units of up to 300sqm and offices of up to 200sqm

(including incubation space of <50sqm). Inward investment has ceased in the current recession and it is not clear if demand from larger firms and the public sector will resume in the future. The present supply of industrial and office space is meeting demand, and land at Eden Business Park is expected to meet future needs.

The current available land supply is 2.83 ha, which comprises serviced plots at Eden and North Lakes Business Parks. Other land at Eden Business Park Phase I has been sold, but development delayed by the concerns of individual owners. Extensive land could be made available at Eden Business Park Phase II (Option Area 6 / Parcel 65) subject to the outcomes of this strategic masterplan and ability to mitigate environmental impact. Retail capacity growth exists. Capacity studies, which address the period to 2021 show a need for a further 20,000 sqm of comparison goods. The greater share is for bulky goods that maybe difficult to accommodate in the Town Centre, and Penrith Retail Park (a 4124 sqm retail warehouse proposal for Ullswater Road) could meet some of this demand. Demand for convenience retail will be met by the Penrith New Squares scheme. Penrith also has a strong local leisure offer, with no obvious gaps in the market.

2.3/ Quality of Place

Quality of place is determined through a number of physical and environmental factors, and includes both tangible, evident features (that represent specific assets or weaknesses) and intangible, subtle qualities that are more difficult to define (but contribute or detract from the 'sense of place' – the experience of being in and moving around an area).

Penrith is the largest town in Eden, and performs the role of a sub-regional centre for rural communities throughout mid and eastern Cumbria. It is also accessible to Pennine communities located in west County Durham and south west Northumberland.

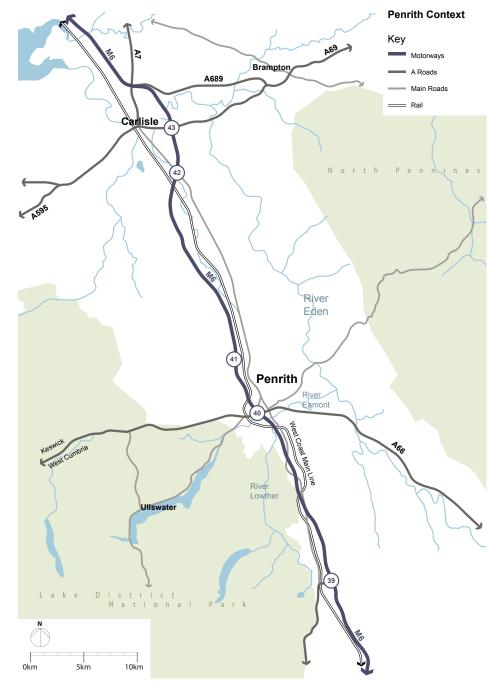
The town is situated at Junctions 40 and 41 of the M6, and marks its junction point with the A66. This position on strategic, historic routes has been central to the rationale for its development and growth, from Roman military post to traditional rural market town. Although now functioning as a modern town centre, with its historic shop fronts and human scaled, distinctive red sandstone buildings, Penrith retains the atmosphere of a historic market town

2.3.1/ Landscape character and protection

Penrith sits within and is surrounded by superb high quality countryside. To the east lies the North Pennines Area of Outstanding Natural Beauty, to the south are the fells of the Yorkshire Dales National Park and to the west is the Lake District National Park.

Penrith is generally noted for being well contained within its landscape setting. Some key strengths and weaknesses of this landscape setting (relating specifically to issues of development, the growth of Penrith urban area and the character of new development) are summarised over page.

Right: Plan illustrating sub-regional context Opposite page: View towards Beacon Hill from Mayburgh Henge within the Eamont Valley



dramatic horizons

- Varying topography providing interest and offering spectacular long distance views from high ground
- A layered and varied character heavily influenced by agriculture
- Strong visual connection between urban area and surrounding landscape, particularly Beacon Hill and the river valleys of the Eamont and Lowther

Weaknesses

- Intensive farming and large field structures mean that vegetated boundaries are limited and edge of settlement locations are generally exposed (although topography aids visual screening in some locations)
- There is a relatively low provision of footpaths, bridleways and green corridors, pointing towards a need to expand the network
- Existing residential development towards the edge of Penrith generally lacks distinctiveness and is not as responsive to natural features (e.g. topography) as older developments closer to the centre (e.g. the New Streets area)
- Large scale commercial buildings, structures and emissions clustered in Penrith's industrial estates are visible from higher ground e.g. Beacon Edge
- The M6 and West Coast Mainline rail corridor create prominent artificial elements in the landscape and present a hard physical edge to the urban area (and physical and psychological barriers to east-west movement)

Policy CS16 of the Core Strategy (Principles for the Natural Environment) states that development should accord with the principles of protection and enhancement of the natural environment, including landscape,



biodiversity and geodiversity and especially those areas designated as being of international, national and local importance.

To further protect the natural environment within the District as a whole, Policy CS16 states that the relationship between development and the natural environment will be managed to minimise the risk of environmental damage, and development should reflect and where possible enhance local landscape character. Policy E37 Landscape Character of the saved Cumbria and Lake District Joint Structure Plan 2006 states that Development should be compatible with the distinctive characteristics and features of Cumbria's landscape types and sub types. This will include consideration for (inter alia) locally distinctive natural or built features, visual intrusion or impact, scale in relation to the landscape and features, the character of the built environment, historic patterns and attributes, and biodiversity features, ecological networks and semi-natural habitats. These principles must help drive the sustainable and integrated expansion of Penrith.

Beacon Hill is a defining feature of Penrith and forms a defining visual backdrop to the town within views from the west and south. Beacon Hill is a highly distinctive element in the area's wider landscape character, forming part of the 'Sandstone Ridge' (landscape category 10) which runs north from Penrith breaking off into a series of hills north of Lazonby as defined by the Cumbria Landscape Character Assessment (Cumbria County Council 2010) (CLCA).

The CLCA recognises the sandstone ridge as a large scale, open landscape with a mixture of open and rough areas. A key characteristic is the expansive, uninterrupted long distance views (in part over the Petteril valley – stretching from the north of Penrith to Carlisle) both toward and away from the Lake District and the Eden Valley, towards the North Pennines. The ridge is particularly prominent from the M6 and West Coast Mainline rail corridor to the west from



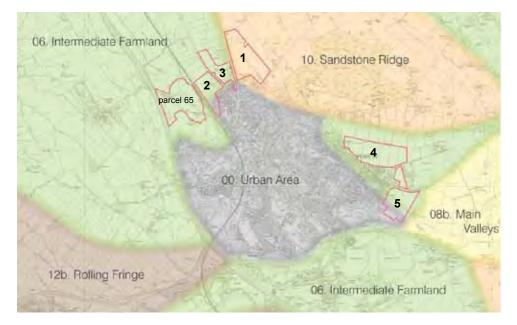
where it provides a distinctive skyline. The CLCA recommends that development should be avoided in exposed skyline locations and ensure developments respect the ridgeline.

The CLCA illustrates how Penrith forms the junction point of four landscape character areas – in addition to the distinctive 'Sandstone Ridge', 'Intermediate Farmland', 'Broad Valleys' and 'Rolling Fringe' come together and merge at this location.

The CLCA describes each landscape

character and provides guidance on inter alia access and recreation, natural and cultural features and development. A summary review of the CLCA and how it relates to Penrith is appended. 2.3.4/ Historic Development: Origins of Place

Penrith's rich and varied history underpins its unique sense of place and distinguishing characteristics. Ancient sites around Eamont, at Mayburgh Henge and King Arthur's Round Table, indicate prehistoric occupation, whilst the town is well known for its Roman



Left (extending to opposite page): Penrith from the west, with the Sandstone Ridge of Beacon Hill forming a distinctive and spectacular backdrop

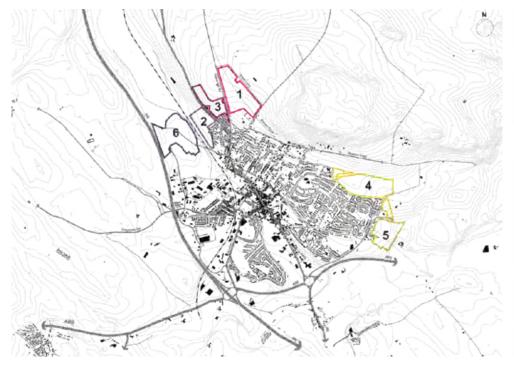
Top: Plan of landscape character areas defined in the CLCA, in the context of the 6 original urban extension Option Area sites



2.3.2/ Topography

Landscape character is inextricably linked with geology and topography. The natural topography of the area, dictated by river valleys and ridges, has fundamentally shaped the growth of Penrith and will continue to do so. A prominent feature of the town is its containment within the shallow valley that sits below Beacon Hill, set out around Thacka Beck - its original water source - and sitting just north of the River Eamont at its confluence with the Lowther. The majority of 20th century residential development has taken place to east of the lowest lying land on the 'foothills' of Beacon Hill, free from flood risk, whilst industrial development occupies the valley floor.

The 185m contour to the east has historically provided a definitive edge to the urban area, roughly following Beacon Edge and marking the transition in landscape character to Sandstone Ridge. The 150m contour to the west signifies the start of the shallow rise in ground levels out of the valley, which continues west across the 'Rolling Fringe' landscape character area. This broadly defines the urban edge to the





west (although this is also heavily influenced by the artificial boundary imposed by the M6).

All of the option area locations are subject to topographical variation. Sites 1 and 4 have perhaps the least dramatic level changes, although it is significant the site 1 sits above the 185m contour in the Sandstone Ridge.

Site 3 contains a dramatic level change within its boundary that increases its exposure to views from the west. This could impact development feasibility and/or achievable densities. Site 5 is bisected by the 130m contour which marks a significant transition from a flat site (to the west of it) and a steeply sloping site (to the east of it), as the ground falls away towards the River Eamont and becomes visually exposed.

Below: Option Area 3 sloping down towards the A6



2.3.3/ Visual analysis

The Council has undertaken a Landscape and Visual Impact Assessment (LVIA) of the development Option Areas identified through SHLAA and LDF processes. This is referenced further in section 4, and a summary review is appended.

The diagrams to the right and opposite expand on the findings of the LVIA to provide a more general illustration of how wider landscape character and topographic characteristics combine to dictate the visual characteristics of the option area sites.

To the north, topography (elevation and slope) presents a risk to the established balance of urban form to natural landscape, and in particular the current relationship between urban area and Beacon Hill / Sandstone Ridge. This is mainly with regards to longer distance views, where the unique setting of Penrith is most appreciated (and where the visual impact of development will be appreciated most significantly).

To the east, the option areas generally



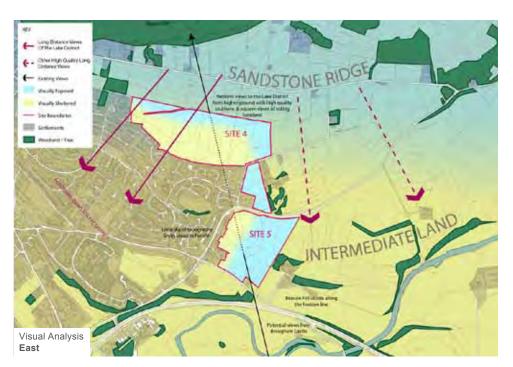
Left: Visual analysis - option areas to the north of Penrith

Bottom: Long distance view towards Penrith from the west @ Tirrel, on the border of the Lake District National Park



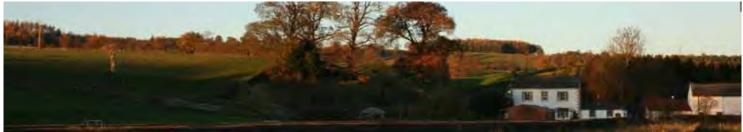
occupy a less dramatic topography. This, and the lower elevation, means that impact of development on landscape and visual impact is in general terms likely to be more localised. With site 4 lying at the same level to existing residential development adjacent, much of it is sheltered from the longer distance views from the west and south (although its edges are exposed).

The eastern / south-eastern half of site 5 (broadly defined by the 130m contour) is prominent to views looking out from within the Eamont Valley and in particular Brougham Castle, and impact on these features of acknowledged importance will need to be controlled.



Left: Visual analysis - option areas to the east of Penrith

Bottom: View from the south east illustrating the visually prominent ridge to the east of Option Area site 5 (Hunter Hall School shown to the right)



settlement – based on advantageous transport routes forts were constructed at the site of Brougham Castle (the confluence of Rivers Eamont and Lowther) linked to another about 10km to the north. These marked the junction point of roads running south-north (to Carlisle), east (over the Pennines to York) and west (to Ambleside). The course of a Roman road runs through the northern and eastern part of the town (eventually meeting the A6 at Plumpton Head, via Inglewood Road.

During the 9th and 10th centuries, Penrith was the capital of Cumbria, at the time a semi-independent state part of the Strathclyde region of Scotland. Penrith Castle and the distinctive narrow streets and passageways are remnants of defence against border raids. Brougham Castle was constructed by the Normans.

Post industrial development of Penrith focused around transport connections. Strategically, growth was driven by the arrival of the railway in the 1840s and the town's continued importance at the junction of key north-south and east-west highway links. Locally, the historically important junction of Castlegate and Middlegate at St Andrew's Church was reaffirmed as the natural centre of the town – the market square.

In the mid-late 19th Century Penrith started to expand out from its medieval core of tight, narrow streets and modest terraced buildings. Grander residential streets started to extend out to the east, towards Beacon Hill (now forming the 'Penrith New Streets' Conservation Area) reflecting the healthy socioeconomic circumstances of the town at that time.

These extending residential areas are prominent features of 1898 Ordnance Survey mapping and are also picked up in mid-19th century map extracts. The latter (see opposite) reveals how the distinctive linearity of the 'New Streets' was shaped by historic field systems / land ownership in linear arrangements running perpendicular to the slope of Beacon Hill. It is also evident how the outward expansion of the settlement has historically been curtailed by the railway – a physical and psychological barrier



which has only ever incorporated a small number of crossing points

Finally, historic mapping also illustrates how Carleton was originally a distinct and separate settlement to the southeast of Penrith. Although now agglomerated within the suburban extents of the town, local references to 'Carleton Village' persist, giving it distinction and sense of place.



Far left (top): Sketch plan illustrating areas of 20th century growth Above: Historic mapping extract, circa 1850 Right: A street elevation within the distinctive, high quality 'New Streets'



2.3.5/ Urban structure

Penrith's location, relationship with its landscape setting and historic development patterns combine to create an idiosyncratic urban structure. This shapes the experience of being in and moving through the town, and fundamentally dictates the sense of place, ease of wayfinding and quality of life.

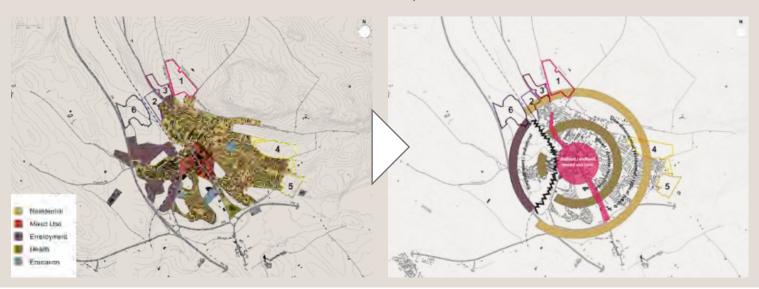
Land use patterns

Land use patterns affect physical form and appreciation of a place. Penrith has a distinctive split in prevailing land use - residential to the north, south and east, and employment to the west, set around a central mixed use core. This mixed use character extends to some extent through along the A6 corridor, particularly to the south of the town centre, e.g. education and healthcare services. This land use structure can be perceived as a concentric pattern extending out from the core. Residential areas - which progress from a diverse inner band (the historic development locations) to a more conventional late 20th Century suburban form - are generally shaped by topography, located on the gentle slopes below Beacon Hill and away from the lower lying areas prone to flood.

Penrith's main employment areas are contained to the west, shaped and

restricted by the artificial boundaries of the West Coast Mainline and M6 motorway.

As edge of settlement sites, the identified growth locations mainly 'plug into' the outer residential band of typical 20th century suburban development and are physically separated from the mixed use core and A6 corridor.



Character areas

Organic historic growth has created areas a distinct character - evident in land use, urban structure, building forms, and materials / building technologies. Although these have 'blurred' boundaries they demonstrate how the more distinguished, higher quality and authentic areas of Penrith are broadly defined by the older, pre-war areas either side of the A6 corridor (including the historic settlements of Carleton and Eamont). In between these areas the town lacks this originality, which is significant given that the growth areas adjoin locations most 'devoid' of character.

Castletown is the residential area to the west of the West Coast Main Line (WCML) incorporating distinctive terracing using local red sandstone.

This is wrapped around by the **Industrial Edge** of Penrith,

characterised by large format commercial and industrial buildings located in the lowest lying land in the valley.

Townhead is the residential area located either side of the A6 to the north (Scotland Road) and defined by its relationship with key linear routes entering Penrith from the north. Buildings display a diverse range of materials including sandstone, render, brick, slate and concrete tiles. **New Streets** broadly covers the conservation area on the western flank of Beacon Hill. The area incorporates substantial residential properties built up the hillside, perpendicular to the slope, providing aesthetic appeal that is in part determined through the consistent use of high quality materials and presence of mature soft landscape features..

Scaws and Carleton is the post-war suburban housing area to the east of the town centre set around Beaconside Infant & Junior School and made up of a mixture of house types and construction with little reference to local context. This area blurs into Carleton Village having now agglomerated the original settlement.

Carleton Village is still evident as a historic settlement along the A686 that includes an attractive terrace of buildings in a recognisable vernacular (although this is diluted by less distinctive post-war housing). The A686 frontage also incorporates a prominent public house, the Cross Keys.



Pategill sits north-east of the A66 bounded by Carleton Road and Bridge Lane (A6) and consists of post-war housing – often with a Radburn planning influence - with no particular reference to place or vernacular.

Wetheriggs defines the area between Bridge Lane (A6) and Ullswater Road / WCML. Its northern end includes Penrith Castle and rail station, but the main body includes inter-war and late 20th Century housing as well as three schools, a hotel (Northlakes) and roadside commercial / retail along the Ullswater Road.

Built environment heritage

The defined Penrith Conservation Area and concentration of Listed Buildings are centred on the core town centre streets and New Streets area. Again, post-war residential areas separate the potential new growth areas from the Conservation Areas, and more distinctive areas of Penrith. This raises the question of how the character of new development should respond to surrounding context, emphasising the opportunity for new development to pick up some of the qualities seen in the core of the town.









Urban green space

Penrith has a reasonable proportion of parks and other green amenity spaces distributed throughout the town centre. The town is also surrounded by open countryside with access to many areas of outstanding landscape.

It is apparent - as illustrated in the plans to the right - that growth areas to the south and east have greater potential to link to existing amenity including outdoor sports areas associated with the schools in the Wetheriggs area. The 'green corridor' that connects northwest from Carleton to the town centre could be reinforced and enhanced as part of the growth plans.

A similar approach should be investigated in relation to creating 'green' connections from the northern growth areas, albeit using existing street space.

Right: View of Penrith on approach from the north east, illustrating how urban green space helps provide a visual foil to built development



2.3.6/ Experiential qualities and daily life

Key features and wayfinding

The idiosyncratic urban structure, unique history and setting combine to create a place with a strong sense of place. Key features in the built form and urban structure affect the experience of being and moving through Penrith, in a positive or negative way, influencing perceptions of quality of place and quality of life.

Key destinations in the town provide important markers, and will continue to provide reference points as the place grows and develops. These are anchor points that shape the place, largely clustered within the historic heart of the town.

Development and in particular urban extensions must recognise and respond to these landmarks, in appreciation of how people and the physical form of the town must interact with them to maintain sense of place. This must include key features outside the main urban areas which also contribute to sense of place and its legibility as a historic, distinctive settlement (including for example Brougham Castle and the Eamont Valley generally).

This highlights the continued need for a strengthening in the network of physical

connections and routes of movement - in particular for pedestrians and cyclists.

In this regard, a key element of Penrith is the A6 and the corridor it creates through the town. This is not only a main, multi-modal route of movement but - from the point of view of legibility and sense of place - it creates a defining spine for the town as a whole. This is reaffirmed by the diverse mix of land uses found through the A6 corridor, including key education facilities, healthcare and a wide range of shops and services.

Social infrastructure provision

A review of land use patterns reveals

36



how main education and health provisions are generally remote from the Option Areas for urban extension, and cluster to the centre and to the south of Penrith.

Education

There are 4 primary schools and 2 secondary schools in Penrith. There are no operational catchment areas, so students can apply to attend any school. Eden District Council continue to work with the LEA and Cumbria County Council in developing an understanding of social infrastructure provisions and requirements in relation to new development. At present, the assumption is that new residential development will generate additional students at a rate of 2no. per 10no. new dwellings.

The plans to the right illustrate the location of schools and their relative physical accessibility. The table below summarises performance.

Located just outside the centre of Penrith, Beaconside CofE Primary School is a large primary school serving a wide catchment which was formed from the amalgamation of two schools. It has 500 pupils on its roll.

The most recent Ofsted inspection, conducted in May 2009, rated Beaconside's overall effectiveness as

School Name		Overall iveness	Score	Age Range	e P	upils on rol	I
Primary Schools							
Beaconside CofE Primary School	bl	3		3-11		500	
Brunswick School		3		3-7		161	
North Lakes School	3		7-11		194		
St Catherine's Catholic Primary	School	3		4-11		104	
Secondary Schools							
Queen Elizabeth Grammar Scho	ol	1		11-18		830	
Ullswater Community College	3		11-18		1445		



'Satisfactory' ('Good' in relation to its early years provision and in terms of personal development and well-being).

Brunswick school is a smaller primary school with 161 pupils on its roll. The most recent Ofsted inspection, October 2009, rate the school's overall effectiveness as 'Satisfactory' (early years provision adjudged to be 'Good').

North Lakes School, located in south Penrith has 194 pupils on roll. The most recent Ofsted inspection, conducted in May 2009, rated the school's overall effectiveness as 'Satisfactory' ('Good' in relation to its early years provision and in terms of care, guidance and support).

St Catherine's Catholic Primary school is a small school with 104 pupils on roll. The most recent Ofsted inspection, conducted in May 2010, rated the school's overall effectiveness as 'satisfactory' (with 'Good' capacity for sustained improvement, and rated as 'good' in relation to its early years provision).

All primary schools are considered

to be at capacity and constrained in terms of expansion opportunity.

Secondary Schools

Queen Elizabeth Grammar School, with 830 pupils on its roll, is a medium sized selective secondary school in Penrith serving a wide catchment that includes rural areas. The most recent Ofsted inspection, conducted in April 2009, rated the school as 'Outstanding' against every category.

Ullswater Community College is a larger than average comprehensive school serving a wide catchment area, with 1445 pupils on roll. The most recent Ofsted inspection, conducted in July 2010, rated the school's overall effectiveness as 'Satisfactory'. It was, however, considered to have 'Good' capacity for sustained improvement.

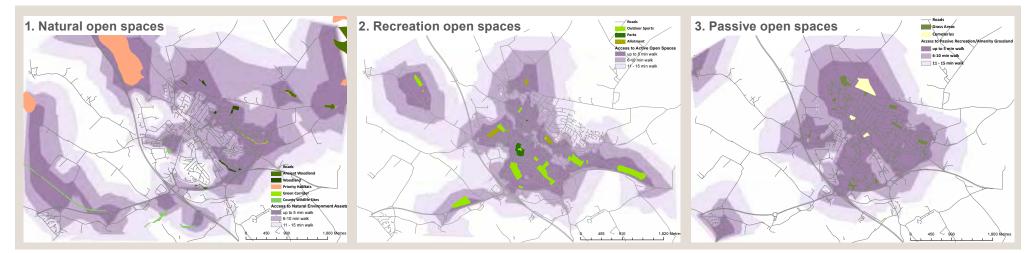
Health Care

Acute Care provision is through Penrith Community Hospital, located on Bridge

Lane. Primary Care is delivered through two GP practices, with a total of 20 GPs. operating out of Penrith Health Centre on Bridge Lane. **Birbeck Medical** Group has 8 male and 4 female GPs and the Lakes Medical Practice also have 8 GPs. With a population of around 15,000 people and assuming a sector standard for GP provision is approximately 1800 people per GP, Penrith has an adequate supply of GPs. **Open space and** recreational Facilities

Penrith's Open Space and Recreational Facilities Study and





Green Spaces Strategy reiterate the importance of open space. Although they do not set provision standards, they set out a range of actions set out around four overarching themes; community; environment, health and well being and young people. Core Strategy policy CS24 provides the associated policy support, seeking to protect open space and recreational land from being lost to development.

The Core Strategy specifically aims to ensure that development;

a. Does not harm to spaces which

perform particular roles (e.g. contribute to the distinctive form and character of a settlement, create focal points, provide the setting for important buildings, allow views into or out of a settlement, nature conservation value).

- b. Does not lead to a loss of open space that would result in (or worsen) a shortfall of land used for informal or formal recreation.
- c. (in the event of loss of open space / recreational land) Provides

replacement facilities of equivalent or greater net benefit to the community in terms of quality, availability and accessibility.

In this context Penrith has a number of important open spaces that provide a range of functions. The plans above illustrate provision of and relative physical access to;

 Natural open spaces – open space that is primarily natural or seminatural, with biodiversity, ecological, amenity and placemaking value.

- 2. Recreation open spaces open space with a primary purpose for active recreation, providing leisure and amenity value.
- **3. Passive open spaces** open spaces with amenity value and/or tranquil, passive character.

2.4/ Key environmental constraints

2.4.1/ Ecology

Environmental and ecological protection, and the promotion of biodiversity, are integral to the concept of sustainable development. The Core Strategy encourages the protection, enhancement, re-creation of restoration of traditional habitats, and expects new developments to contribute positively to biodiversity and mitigate harm.

In general terms, a key risk at any of the potential development sites would be disturbance to or loss of trees and other vegetation. Mature trees within the development site (s) would have to be subject to detailed survey and habitat assessment.

Development sites also pose pollution risk to ponds/watercourses and this must be carefully managed. Habitat Suitability Assessments (HSI's) and potentially full surveys should be conducted on ponds within 500m of sites to confirm presence of protected species such as Great Crested Newt.

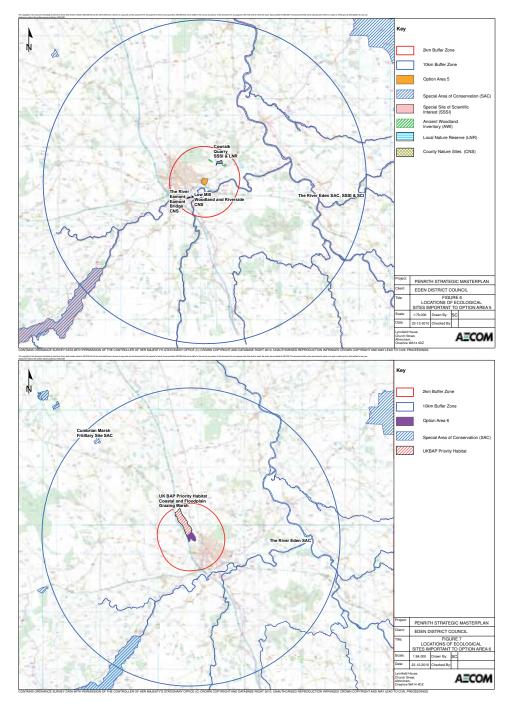
Penrith and all the urban extension

locations under consideration sit in the context of national and international ecological interests (such as the River Eden Special Area of Conservation (SAC) and Cumbrian Marsh Fritillary Site SAC) and the presence of several noted protected species including bat, badger, snakes, otter and red squirrel.

Notwithstanding, there are some notable local relationships that will require careful mitigation, e.g.;

- Parcel 65 ("Option Area 6") lies adjacent to an area of "Coastal and Floodplain Grazing Marsh" which is designated as a UKBAP Priority Habitat.
- Option Area 5 lies within 2 Km of (i) Cowraik Quarry LNR & SSSI; (ii) The River Eden SAC & The River Eden and tributaries SSSI; (iii) two areas of ancient and semi natural woodland; (iv) The River Eamont, Eamont Bridge County Nature Site and; (v) Low Mill Woodland and Riverside County Nature Site.

These are identified to the right.



2.4.2/ Flood Risk

The plan below shows the location of the 6 Option Area sites and their proximity to Flood Zones 2 and 3 associated with Thacka Beck, the River Eamont and river Lowther. It should be noted that there are additional sources of flood risk not mapped at this level which will require more detailed flood risk investigation as development sites come forward, in particular the watercourses that run through Area 6 to the north and east of Area 5.

With regards flood risk from land it is possible that steep topography could

Picod Risk Picod Zimit Picod result in heavy rainfall flowing overland into sites, and this must be analysed in further detail as development proposals progress. The disposal of surface water from sites is a much greater concern and priority issue, especially given the local topographic characteristics.

At this stage Environment Agency are keen to ensure that sustainable drainage systems (SuDS) are incorporated at detailed masterplanning stage (not left to be conditioned at planning stage). Strategic SuDS covering more than one site is a particular opportunity, rather than apportionment on a piecemeal basis: holistic SuDS provide significant advantages such as reduced water quantities, enhanced amenity/aesthetic value, reduced environmental impact and reduced cost.

		Management Train Suitability						Water Quantity				Water Quality							Environmental Benefits			
Technique	Description	Prevention	Conveyance	Pre-treatment	Source control	Site Control	Regional Control	Conveyance	Detention	Infiltration	Water Harvesting	Sedimentation	Filtration	Adsorption	Biodegradation	Volatilisation	Precipitation	Uptake by plants	Nitrification	Aesthetics	Amenity	Ecology
Water butts, site layout and management	Good housekeeping and design practices.																					
Pervious pavement	Allow infiltration of rainwater into underlying construction/soil.									-			-									
Filter drain	Linear drains/ trenches filled with a permeable, often with a perforated pipe at the base of the trench.		•		•	-		•	•				•	•	•	•						
Filter strips	Vegetated strips of gently sloping ground designed to drain water from impermeable areas and filter out silt and other particulates.			•	•							-	•	•	•							
Swales	Shallow vegetated channels that conduct and/or retain water (and can permit infiltration when underlined). The vegetation filters particulates.		•		•	•			•				•	•	•							
Ponds	Depressions used for storing and treating water. They have a permanent pool and bankside emergent and aquatic vegetation.					-	-		-		-	-	•	-	-	-	•		-	-	-	•
Wetlands	As ponds, but the runoff flows slowly but continuously through aquatic vegetation that attenuates and filters the flow. Shallower than ponds.					•			•		•		•	•	•	•	•		•		•	•
Detention Basin	Dry depressions designed to store water for a specified retention time.					•	•		•						-			-				
Soakaways	Sub-surface structures that store and dispose of water via infiltration.				-					-			-	-	-							
Infiltration Trenches	As filter drains, but allowing infiltration through trench base and sides.				-	•			-	-			-	-	-	-						
Infiltration basins	Depressions that store and dispose of water via infiltration.						-									-					▲	
Green roofs	Vegetated roofs that reduce runoff volume and rate.																					
Bioretention areas	Vegetated areas for collecting and treating water before discharge downstream, or to the ground via infiltration.				•	•				-		•								•	-	
Sand filters	Treatment devices using sand beds as filter media.																					
Silt removal devices	Manhole and/or proprietary devices to remove silt.											-										
Pipes, subsurface storage	Conduits and their accessories as conveyance measures and/or storage. Water quality can be targeted using sedimentation and filter media.		•			•		•	•													



Above: Table showing the capability of different SuDS techniques (Extract from CIRIA C697, Table 1.7)

2.5/ Movement and Transport

2.5.1/ Strategic context

Penrith is well located to take advantage of the strategic transport network, in particular;

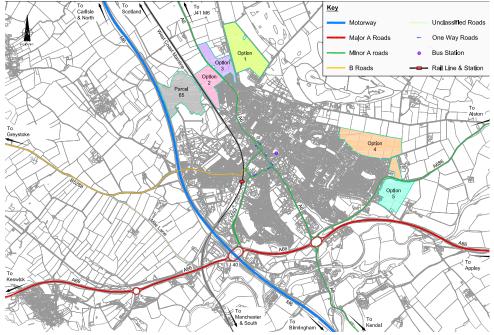
- Excellent rail connections through its direct access to the West Coast Main Line. This makes other towns and cities, such as Kendal and Carlisle, readily accessible for employment opportunities;
- Two direct connections with the M6 via Junctions 40 and 41 (which is to the north and outside Penrith's urban area). This places it between key economic areas of North West England and Central Scotland, both with their ports and airports as well as major populations.
- Direct connection to the key east / west corridor of the A66, which ultimately links the 'Energy Coast' of West Cumbria to the industrial heartland and ports on Teeside and forms an important rung on the North of England Strategic road network.

Penrith is partially dissected by the West Cost Mainline Railway to the west of the town, with the M6 acting as an outer edge boundary to the west of this. The A66 runs to the south of the town providing a southern border. The A6 cuts through the heart of Penrith providing a link through to the north as well as connecting to routes off to the east and west. The A592 connects the town centre to Junction 40 of the M6 and the B5288 provides a link out to the west as well as connecting the parcel of land sandwiched between the railway and the M6.

In the centre of the town there is a gyratory arrangement with a system of one way roads helping traffic to flow round and through the town centre, although it appears that congestion is considered problematic locally, anecdotally.

The following transport network issues are central to the strategic masterplan;

1. The concentration of traffic in the southern guadrant of the town, both



local and through movements putting pressure on Junction 40 of the M6. This junction has recently been improved by the Highways Agency – further improvements would require costly physical works. Additionally the other southern roundabout onto the A66 is a pressure point on the network, resulting in current plans proposing signalisation.

 Access to the Gilwilly Industrial Estate, its hinterland and it's expansion zone this being the main employment area of Penrith, but which is convoluted with no direct links to M6 junctions. Also, the main

2.5.2/ The highway network

area of the industrial estate has only a single access point off Newton Road. A key issue within the town is that of the presence of key industry and employment to the west of the town between Railway and M6 motorway, while the bulk of Penrith's residential areas are to the east. This means that traffic has to cross the town centre area to link these land uses, this being exacerbated by over-reliance on historical radial routes to and from the town centre.

- The West Coast Main Line creates a barrier to east / west movement, and concentrates traffic at a limited number of rail crossings. Also linked to this issue, there is a lack of route choice for north / south traffic, which again focuses movements on links and junctions – particularly, the A592 corridor;
- 4. The public realm of the town centre has recently improved, and appears prosperous and popular. However, the configuration of the surrounding roads does mean that for certain traffic movements it is more convenient to travel through the town centre, rather than use other routes. If the town continues to grow the town centre has to continue to upgrade its presence and amenity value alongside, otherwise outmigration of movement for such will occur.
- Following from the above over reliance on routes to and around the town centre for non town centre movement is a key issue for all modes and such orbital demands need to be considered.

2.5.3/ Public Transport

Penrith Railways Station is on the West

Coast Main Line (WCML) and provides access to frequent services to the north and south, details of which are shown below. The station is located on the A592 and is within easy walking distance of the town centre. A bus stop is located outside of the station providing an interchange point with other bus services.

Penrith's Bus Station is located on Albert Street. Several long distance services operate through it, including 104 (Whinfell Forest (Center Parcs), - Penrith - Carlisle), and 106 (Kendal Rail Station, Tebay Mountpleasant, Orton, Shap, Clifton, Penrith). Due to the scale of Penrith, there is insufficient demand to support a more extensive local bus service and currently the majority of bus routes within the town are part of longer distance services. New developments should be designed in a way which are permeable to buses to ensure that if the demand arises, the services can easily access the sites on a route (e.g. avoiding cul-de-sac based highway layouts).

Route		Sat	Sun	Approx. Duration	Operators			
London (calling at lancaster, Preston, Wigan North Western, Warrington, London Euston)	5 per day	6 per day			Virgin Trains			
Glasgow (Calling at Carlisle, Lockerbie, Motherwell, Glasgow)	12 per	15 per	12 per	1 hour 30	Transpennine Express			
	day	day	day	minutes	and Virgin			
Edingurgh (Calling at Carlisle, Lockerbie,	9 per	7 per	9 per	1 hour 40	Transpennine Express			
Haymarket, Edinburgh)	day	day	day	minutes	and Virgin			
Manchester (Calling at Oxenholme, Lancaster, Preston, Manchester)	7 per	8 per	6 per	1 hour 40	Teanspennine			
	day	day	day	minutes	Express			
Birmingham (Calling at Oxenholme, Preston, Lancaster, Wigan North Western, Warringtono, Crewe, Wolverhampton, Birmingham)	5 per day	6 per day	3 per day	2 hours 40 minutes	Virgin Trains			

2.5.4/ Walking and Cycling

There are a number of pedestrian thoroughfares throughout Penrith providing access for pedestrians to cut through from the residential areas into the town centre. This provides a more direct route to the centre making walking more appealing and accessible.

The topography of Penrith makes walking and cycling less appealing further with some steep roads on all sides of the town leading down into the centre and is particularly difficult for people with pushchairs and wheelchairs, as well as hazardous in winter weather.

Cycle routes through the town are available on some sections of the network, notably along Drovers Lane and Carleton Road. A plan, taken from a cycle study in 2006, is shown to the right highlighting the available and proposed routes.

2.5.5/ Road Safety

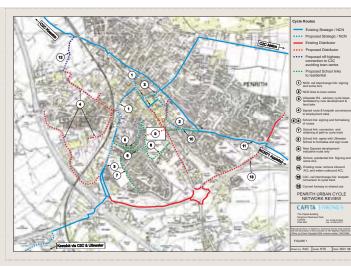
Right: cycle routes

Cumbria Police have kindly provided the latest five years injury accident data for the roads and streets of Penrith. The below image gives the locations of all slight, serious and fatal accidents in and around the town that were recorded during this period.

Detailed analysis of the accident types, and causes as not been undertaken as part of this work. Rather, the accident locations have been reviewed to determine if there are any particular clusters – and if so, could they be worsened by the development proposals. The evident clusters (assumed to be those locations where there were more than seven accidents) are represented in the below figure. As can be seen, all of the accident clusters appear to be along the A6 corridor – with the largest concentrations being at the A6 / A66 Kemplay Bank Roundabout, and in the vicinity of the Stricklandgate / Duke Street gyratory. However, the signalisation of the A6 / A66 roundabout proposed under the Penrith New Squares scheme should have a positive effect on accidents at the junction.

The accident cluster at the gyratory would be worthy of a more detailed investigation as turning manoeuvres are reduced at these types of junctions. 2.5.6/ Traffic Flows

Key to the strategic masterplan is an overview assessment of the possible traffic impact implications of new





developments on Penrith's highway network. This will help guide what mitigating measures may be required to accommodate the new activity.

TRADS data has been used to understand flows in and out of the town along the key routes. TRAD sites are located at three positions within the town – A6 Scotland Road to the north of the town, A6 Scotland Road to the south of the town and A592 Ullswater Road feeding in to the west of the town. These three sites provide a good overview of the key routes into and out the town.

Hourly flows at these sites were analysed for the month of September 2010. Based on a neutral term-time day (Wednesday 15th September) the following peak results were produced.

2.5.7/ Trip Distribution

A schematic model has been created to illustrate the key routes into and within Penrith to try to provide an overview of how the network would be affected through the introductions of the more residents at each of the potential growth locations.

This modelling work is reviewed at section 4.5.

Time	ne Sites												
	SB, A6, Scotland Road	NB, A6, Scotland Road S	B, A592, Ullswater Road	NB, A592, Ullswater Road	NB, A6, Bridge Lane S	B, A6, Bridge Lane							
AM Peak 8am – 9am 19	4 172	32	8 2	247 21	8	291							
PM Peak 5pm – 6pm 28	0 313	58	3 5	501 41	6	633							