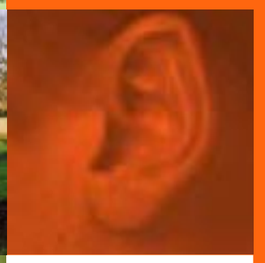
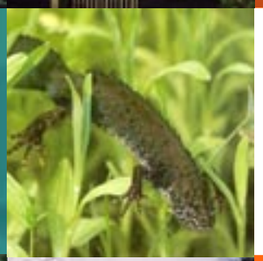
TMC

THE TELFORD

Millennium Community

at EAST KETLEY



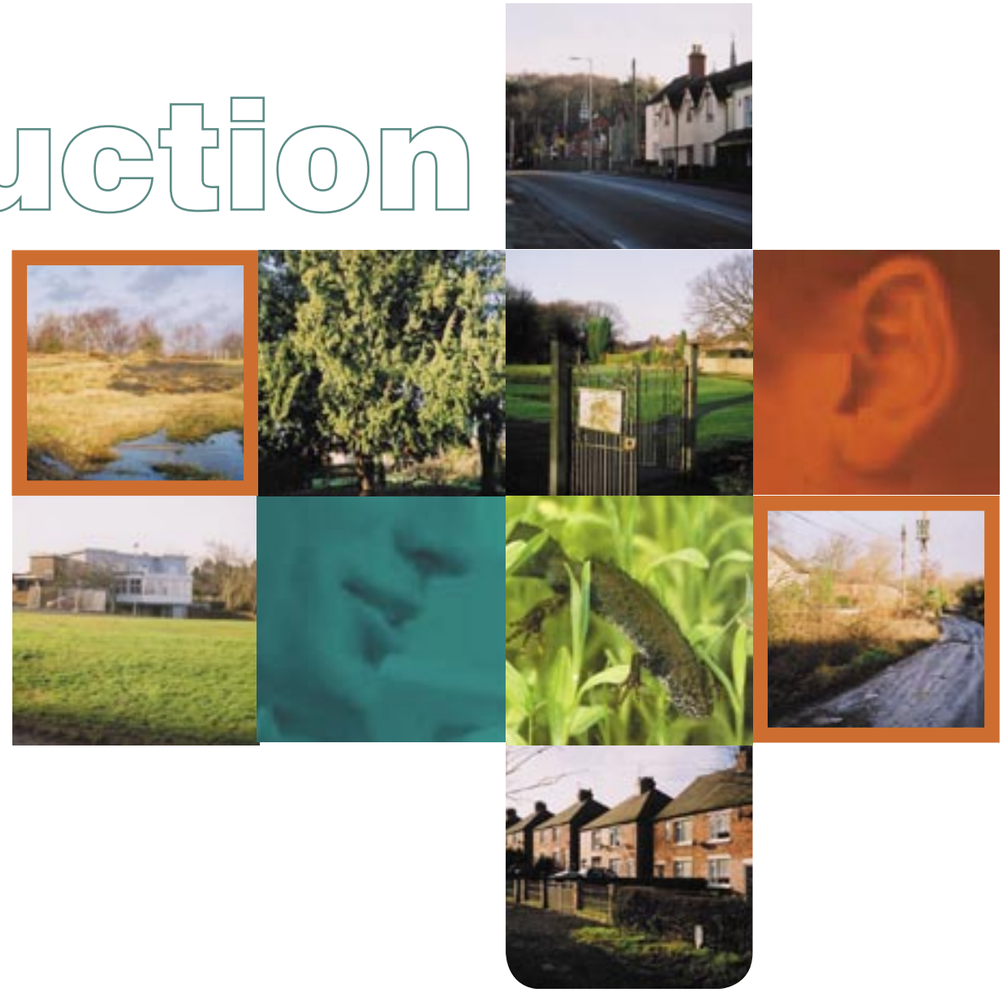


DESIGN STATEMENT

Prepared by URBED, JRUD, Lifschutz Davidson, ENTEC and SYMONDS

August 2004

1. Introduction



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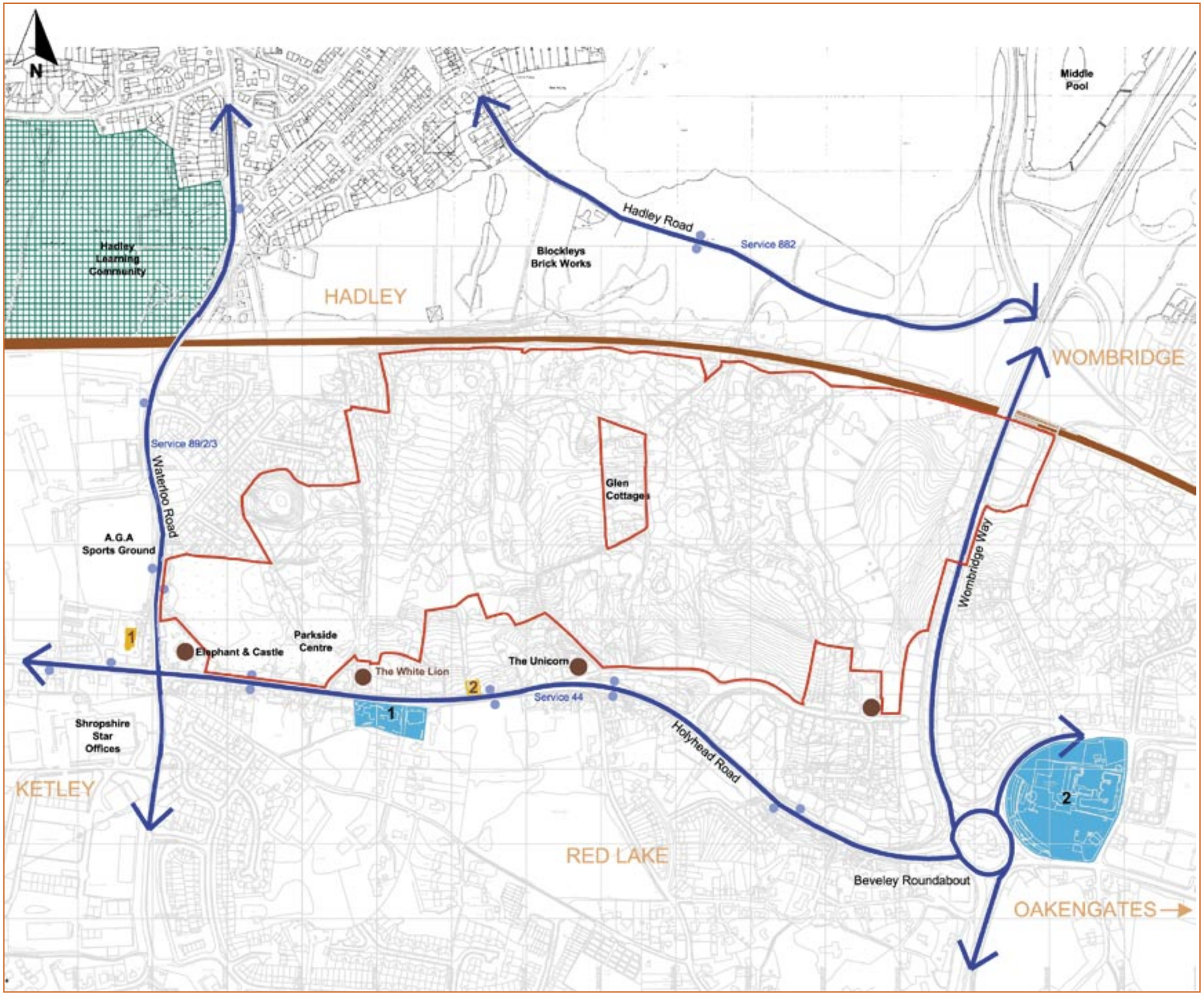


Site context

Key

- Site
- Bus Routes
- Bus Stop
- Railway Line
- Pubs
- Hadley PFI Site
- 1 Ketley Infant and Nursery School
- 2 Telford College of Arts & Technology (Oakengates Annexe)
- 1 Methodist Church
- 2 New Testiment Church of God

1.1 Introduction

This Design Statement explains in a simple and logical manner the Millennium Community Objectives, the Site and the consultation process that has been undertaken prior to the Outline Planning Application for the development at Telford Millennium Community.

The Development Partners – English Partnerships, the Borough of Telford & Wrekin and Taylor Woodrow – have a shared vision for TMC and it is hoped that the commitment and enthusiasm that has inspired the project over the past 15 months is conveyed in this document.

The Design Statement is the explanatory document that accompanies the technical information contributed by the consultants URBED, Jon Rowland Urban Design, Lifshutz Davidson, Symonds and Entec. The broadest master planning considerations have been explored and challenged and the resultant recommendations on issues such as ecology, traffic and dealing with the needs of the integrated community have been incorporated in this application.

> This design statement reflects and documents the technical and community involvement work undertaken by the team and how the masterplan has grown out of this process.

Of particular importance in this document and throughout the application are the statements that explain the Applicants' commitment to environmental issues, sustainability, community consultation and innovation; all commitments that distinguish this project.

The Statement has been divided into four sections, summarised as follows:

Section 1 Overview and the millennium community vision; the history of the site, its context, constraints and opportunities and the partners' commitment to sustainability and innovation objectives

Section 2 The Development Concept including the stakeholder consultation together with an explanation of how the design vision evolved

Section 3 The Development framework including the concept masterplan and chapters that describe the different land uses and project objectives. Also included is the ambition to explore alternative 'community based' stewardship arrangements

Section 4 Plans and schedules that form the regulatory framework for the application

The Telford Millennium Community (TMC) site – illustrated on the plan to the left – covers 37ha (87 acres) of land in the area bounded by Holyhead Road, Waterloo Road, Wombridge Way and the Wolverhampton to Shrewsbury railway line. The site is affected by a significant number of constraints including two land fill sites, 26 mine shafts, colliery spoil, a row of cottages in the centre of the site, areas that are ecologically important and playing fields held in trust for the local community. The site is jointly owned by The Borough of Telford and Wrekin and English Partnerships.

The site is located on the A618 about 3km from Telford Town Centre and midway between the local centres of Oakengates and Wellington. It has good road access and is just over 1km from junction 6 of the M54. Ketley is a dispersed neighbourhood of former mining settlements including Pottersbank, Beveley and Redlake strung out along the Holyhead Road that was formerly the Roman Watling Street.

1.2 The vision for TMC

The Millenium community concept

The Telford Millennium Community at East Ketley is one of a series of Millennium Communities that are being promoted by the Government through English Partnerships. This programme was announced by John Prescott in 1998 to explore and demonstrate new approaches to the design of housing and neighbourhoods for the coming century. As such the Millennium Communities were to fulfil a number of criteria:

- To embody the best in environmental sustainability including energy-use, water use, recycling and ecology.
- To demonstrate the best in urban design and to show how higher density housing and modern methods of construction can be developed attractively.
- To illustrate measures to reduce car use and promote walking, cycling and public transport.
- To explore the potential of efficient construction including off-site construction and efficient site practice.
- To be designed and built in consultation with local people and to incorporate the principles of social sustainability.
- To incorporate life-long-learning and incorporate new developments in Information Technology.

Each of these headings can be broken down into a range of sub-issues. These have been set out by English Partnerships in the Millennium Community Standards which all Millennium Communities must meet.

The purpose of Millennium Communities is to encourage a 'step-change' in the building industry. They therefore seek to achieve standards that can be met by the building industry working under normal commercial parameters - in other words, the same conditions that are to be found on sites up and down the country. It is for this reason that the Millennium Communities are being built within normal timescales, market conditions and cost parameters without significant grant input (other than to cover abnormal site conditions). In this way they will provide a practical and attainable model for other developers.

The Millennium Communities programme was announced in 1998 to explore and demonstrate new approaches to the design of housing and neighbourhoods for the coming century.

There are seven Millennium Communities planned in total.

Greenwich: The first community announced in 1998 on the Greenwich peninsula near the Millennium Dome has been developed by Countryside Properties and Taylor Woodrow.

Allerton Bywater: The second Millennium Community announced in 1999 is in the former mining village of Allerton Bywater outside Leeds. The scheme is being developed by Miller Homes and Gleesons to a masterplan by Aire Valley Design. Work started in Autumn 2003.

New Islington: The third community, in central Manchester, is a redevelopment of a council estate in Miles Platting. The scheme by Urban Splash has been masterplanned by Will Alsop. The design of the scheme is perhaps the most radical of the millennium community schemes and now has planning permission.

In 2002 the government announced that the other Millennium Communities would follow in quick succession including East Ketley in Telford, East Lynn in South Lynn, Oakgrove in Milton Keynes and Hastings in East Sussex.

The Telford Millennium Community

Taylor Woodrow emerged from a stringent competition process as preferred developer in Spring 2003 to develop the 37ha site in East Ketley.

The Taylor Woodrow bid included indicative proposals for the site prepared by URBED and Lifshutz Davidson, illustrated above. The bid scheme was only illustrative and is not the starting-point for design. The masterplan has instead been developed through a collaborative process with the local community as described in Section 2. At the heart of this was Design Week, which took place in November 2003. This led into an intensive design period in conjunction with the Community Consultative Group (CCG), which culminated in a revised masterplan, which was displayed at the end of May 2004. This masterplan has since been developed into the scheme described in this Design Statement.

The scheme has been developed through an intensive process involving a series of specialist areas. These have included: ecology, ground conditions, sustainability, access and green transport, information technology and community engagement. In each case specialist teams have been developing detailed proposals to meet and in most cases exceed Millennium Communities Standards.

References:

- TMC Brief, Published by English Partnerships November 2002
- Taylor Woodrow TMC submission March 2003

1.2.1 Delivering the TMC vision

Innovation and Sustainability

The Taylor Woodrow bid included substantial proposals for innovation and sustainablity; ideas to be explored and evaluated during the collaborative design process for the masterplan. A wide range of sustainability themes and applications have been explored in depth by the consultant team, and the resulting justifiable proposals are embodied in the masterplan. This is explained more fully in Section 3 of the Design Statement as well as in depth in technical documents submitted with the planning application, e.g. Water Management and the Sustainability Appraisal

The TMC proposals therefore incorporate the following sustainable commitments which are summarised under the most relevant sustainability objectives. Where approaches contribute to the TMC targets, this is identified within the text.

Social Progress which Recognises the Needs of Everyone

To actively support and secure widespread community participation, and to encourage citizenship, environmental awareness and community action

- TMC has incorporated a number of methods for local community engagement in formulating their proposals.
- Options for the long term stewardship of TMC remain to be formalised although the input of the registered social landlord (RSL) and community within a management company or trust will be taken forward.
- The provision of spaces such as public squares, parkland and allotments and facilities within the development to encourage residents to meet and interact.
- The installation of ICT including applications such as a community intranet support community interaction.

To reduce crime and the fear of crime, creating a secure and safe environment

- Designing the new neighbourhoods in line with the principles of reducing crime and the fear of crime, including avoiding narrow, isolated footpaths and enabling passive surveillance of public areas and car parks.
- Through the use of the ICT network, opportunities exist for limited CCTV provision of certain public areas within the site.
- Provision of effective lighting including pedestrian and cycle routes and at all bus stops should contribute to a stronger sense of security.

To provide high quality homes, suited to people's needs at a price they can afford

Public Square

- A wide range of dwelling types and tenures is proposed comprising houses and apartments.
- Dwelling design will seek to maximise daylighting and sunlighting opportunities within a balanced approach that also considers implications for energy efficiency.
- Dwellings will also incorporate improved noise insulation thereby meeting the TMC target for a 10% improvement on current building regulations.
- The opportunity exists for other forms of housing such as supported housing, live work units and self build.
- A key principle of the housing mix is to ensure that no distinct affordable housing areas are created. Instead positive 'pepper potting' of the social rented and other tenures throughout the site will ensure a balanced residential mix within each phase.
- During construction, the employment of a dedicated Quality Manager will ensure that the TMC target to reduce snagging defects will be achieved.

To provide opportunities for healthy lifestyles, and reduce inequalities in health

- Support will be given for opportunities within the development to provide health facilities within the community area.

Community Park

- Public and semi-public spaces, including Home Zones, will be designed to encourage people to meet and interact.
- Encouragement will be given to new residents to get involved in sport and recreation and other group activities on site.
- The amount of open space within the development will be maximised, providing footpaths and cycleways within the community.
- Encouraging links to the facilities at Hadley.
- A dedicated health and safety manager will lead to a reduction in on-site injuries. Thereby supporting the attainment of the TMC target to improve on national injury rate by 50%.

To promote independence for those who are older, or who are mobility or sensorily-impaired and to provide high quality services that meet residents and community requirements

- Housing specifically for the elderly will be located close to local services.
- The provision of public transport into the community and enhanced links with facilities within the wider community will be supported.
- An ICT system will be established that provides opportunities for the delivery of services and meeting

School

the TMC target of incorporating accessible data points in the living room and bedrooms of all homes.

- To widen participation in education and training and increase social inclusion, particularly amongst those with low levels of qualifications
- Providing a new primary school within the site that will also provide opportunities for after hours learning.
- A range of renewable energy options for the school are being investigated that can serve as a demonstration project to the wider community.
- The school will be linked to the community through ICT.
- A 'welcome pack' will be provided to new householders explaining the sustainability principles behind TMC and opportunities to become involved in its on-going stewardship.

To reduce noise, dust and other nuisance, particularly those arising from construction activities

- Action will be taken to minimise and control any nuisance arising from construction traffic by using measures such as controlling vehicle speeds, wheel washing of HGVs and keeping all site entrances clean, careful management of deliveries and reducing the need to import and export material.
- The development is to achieve certification from the Considerate Constructors Code scheme together with the use and adherence to the Taylor Woodrow Development's Environmental Management Plan.

Effective Protection of the Environment

To provide a well-designed, accessible and pleasant living and working environment

The masterplan encapsulates a series of broad principles:

- To create a sense of place that will respond to both the complex nature of the site and the desire for different local identities within the new community;
- To create a highly connected movement network incorporating safety and security concerns;
- Creating a strong unifying feature via the spine road;
- Constructing a new land form to maximise sunlight and daylight levels;
- To construct a legible development;
- To work with existing landscape and ecological features;
- To provide flexibility and energy efficiency in buildings.
- Housetypes are being specifically designed for the site. They will be flexible and capable of incorporating a range of Green options and ICT technology.
- The Housetypes will be built to Housing Corporation SDS standards and meet the BRE Ecohomes Excellent standards thereby achieving TMC objectives.

To reduce environmental pollution and seek to enhance environmental quality (including air, water and land pollution)

- Contaminated soil exists on site. It will be relocated as far as is possible within the site onto those areas that are not subject to sensitive end use in accordance with a risk based approach.
- Gas control measures will be needed within all foundations to control elevated CO_2 levels over the site.
- Taylor Woodrow Developments will enter into the Considerate Contractors Code that will require them to ensure that impacts arising during construction are minimised.

To conserve and enhance the landscape, cultural heritage and biodiversity on the development site and vicinity

- The masterplan seeks to work with key existing landscape aspects such as the ecologically sensitive areas across the northern boundary of the site; the green corridors, existing trees and hedgerows.
- Existing habitats such as the

Newt Ponds

lowland heath, ponds, woodland and hedgerows and green corridors are to be preserved in situ as far as is possible and the impacts of development analysed through environmental management procedures.

- Where habitats of nature conservation value are predicted to be compromised then they will be either translocated or recreated on a 2 for 1 basis. Source habitat will not be lost before its replacement is established.
- A Biodiversity Strategy and Habitat and Species Management Plan will inform the development and long term stewardship of the site. In particular reclamation will be phased such that the relocation of the ecology can be undertaken and natural screening of Glen and Hayes Cottages can be in place for as long as possible.
- To reduce surface run-off a Sustainable Urban Drainage system forms an aspirational sustainability target for TMC and its use is proposed for within the site. In addition to the attenuation of surface water flows SUDs can provide an important recreational and environmental resource, which will also enhance the landscape and character of the development.

Prudent Use of Natural Resources

To make efficient use of land, through the re-use of previously developed land and existing buildings

- The site has been previously developed although it has been recognised that it incorporates a range of important habitats and species which require protection.
- The key environmental features on the site will be retained and their settings enhanced.
- Housing densities throughout the site will take into account existing features and the requirements for habitat and species protection. The overall density will be higher than the Telford average.

To increase transport choice, improve sustainable transport opportunities and reduce the growth of road traffic congestion and reliance on the car

- TMC is located in an accessible location for a wide range of facilities.
- A Transportation Strategy has

been developed to identify how the advantages of this location can be maximised and how the use of the private motor car discouraged.

- TMC will incorporate a range of green transport options including a strategic bus service and a demand responsive bus service.
- To encourage cycling, off-site routes will be enhanced.
- Cycle maps will be provided and a cycle purchase discount scheme will be investigated.
- It is intended to establish a car share scheme and to promote car clubs dependant upon sponsorship.
- Home Zones will be throughout the site and together with safe routes to school they will promote walking as it is the most sustainable form of transport.

To make more efficient use of energy and water

- All homes will feature water efficient fittings to control usage and achieve the TMC Sustainability Target of a 20% reduction.
- Water audits, gardening advice, possible visible metering and water butts will also be provided to increase water efficiency.
- Rainwater Harvesting will be promoted at the proposed primary school, which will improve its efficiency and act as an educational tool.
- All homes will be developed to a high level of energy efficiency as part of the requirement for achieving Ecohome Excellent and the TMC target to reduce metered energy consumption by 20% over Building regulations Part L (2002 ed.).
- To minimise emissions of greenhouse gases and the impacts of climate change; all homes will be provided with electricity through a 'Green Tariff' system that supplies electricity from renewable sources. An education pack explaining the benefits of renewable energy will be provided.
- Solar powered water heaters and photovolatic energy systems will be provided as an option to house purchasers for those properties that have the potential to benefit from such facilities due to their orientation relative to the sun.
- The use of Combined Heat and Power (CHP) has been explored thereby meeting the TMC aspirational commitment to investigate its feasibility. CHP may be applicable for some residential apartments and for the school and community buildings.
- Alternative options for the school and community buildings include the use of a biomass boiler and/or a ground source heat pump.
- Small scale wind turbines on the site likely to be concentrated around the school and community building.
- Opportunities to reduce embodied energy levels at all stages in the construction of dwellings are being taken. Thereby achieving the TMC target to reduce typical embodied energy levels by 50%.

To reduce the amount of waste requiring final disposal, and seek the best practicable environmental option for managing waste

- Implementing the Taylor Woodrow Development's waste management, segregation and recycling protocol through the construction phase of the development with specific requirements to meet the TMC targets for reducing construction waste to 25m3 per domestic dwelling maximising the re-use of on-site materials.
- Working with the Borough of Telford & Wrekin, TMC will adopt their existing trial where each household has a wheeled bin for garden waste, one for residual waste and a box for dry recyclables. Kerbside collection of the bins is split over alternate weeks thereby meeting the TMC target to provide facilities to pre-sort 50% of domestic waste.
- Providing local recycling or 'bring-sites' within TMC to increase the waste streams capable of being recycled is being explored. Inclusion of 'bring sites' within a comprehensive kerbside collection system will meet the TMC target for developing a Community Waste Strategy.
- Home compostors will be offered as an option to residents and allotment holders to reduce organic waste disposal.
- Kitchen waste disposal units may be appropriate for apartment blocks subject to further discussions with statutory bodies.

Live/Work units

Maintenance of High and Stable Levels of Economic Growth and Employment

To provide economic opportunities for local people and businesses through local sourcing

- Flexible building types will be provided including provision for 'live-work' units and home working within all dwellings through the concept of an ICT linked 'Home Office'.
- Local employment opportunities for local people and businesses in the construction phase will be supported, promoting involvement through the use of local 'roadshows'.
- Where possible priority will be given to the employment of local sub-contractors during construction.

To enhance competitiveness by improving the skills of the local and regional workforce

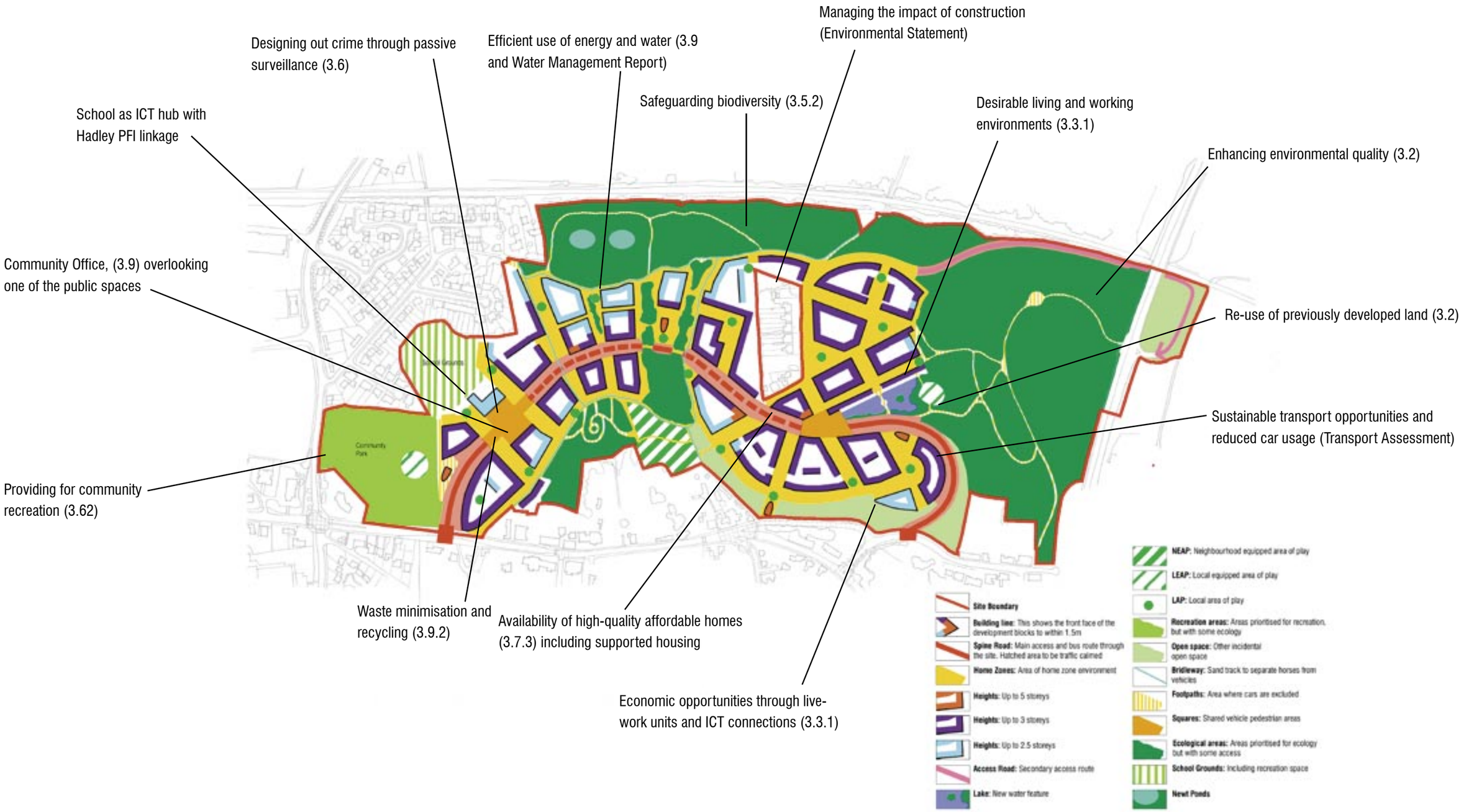
- Local skills training in construction will be supported, particularly the use of off-site construction techniques in collaboration with system manufacturers and the Local Skills Training Council.

To promote and ensure sustainable business practices amongst suppliers and set an example for others in the region

- The principles of sustainable development at TMC will be understood and acted upon by contractors and sub-contractors.
- The adoption of Ecohomes Excellent will set an example to others in the region.

To contribute to the sustainability of Telford

- Development of a predominantly brownfield site, but with ecological value, in an accessible location providing much needed housing, at densities higher than the Telford average demonstrates good principles of sustainability.
- The adoption of the Home Zones concept, EcoHomes Excellent dwellings, modern methods of construction techniques and contemporary architecture sets a benchmark for Telford.



(Figures in brackets reference Design Statement sections)

1.3 Background to the site

The development of a Millennium Community is an opportunity to continue the innovation that has characterised the development of one of the UK's most successful new towns.

The TMC site lies at the heart of Telford, a new town designated in 1963, which brought together the existing towns of Dawley, Oakengates and Wellington plus a host of small villages. The 37 hectare site is one of the last sections of the new town to be developed. The development of a Millennium Community is an opportunity to continue the innovation that has characterised the development of one of the UK's most successful new towns. In this section we provide some background to the site and its development.

We start by looking at the history of the area from the Romans to the industrial revolution and the mineral workings that scarred this part of Shropshire. We look then at the history of the new town and its place in the great planning movement that saw the new towns as centres of innovation and new ideas in planning. This will be followed by an analysis of Telford today, the economy and the people of the town. From this it is clear that Telford continues to be a success story with a growing population and an economy that has successfully made the transition between engineering and knowledge industries. This leads on to an analysis of the structure of Telford today and the conclusion that, for all of its successes, the town planning legacy of Telford is not so positive. It is a town of disconnected neighbourhoods and a car- dominated environment that is yet to establish a strong identity.

Telford continues to be a success story with a growing population and an economy that has successfully made the transition between engineering and knowledge industries.

1.3.1 A rich history

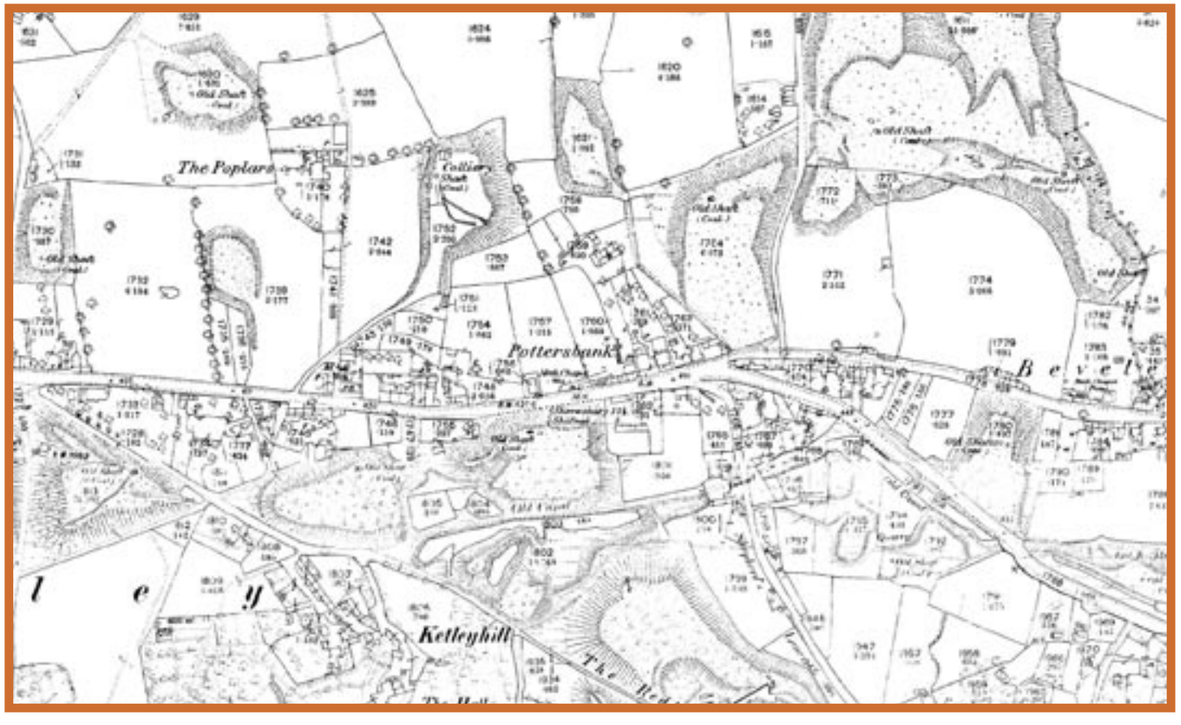
Telford is an area rich in history. The Wrekin rising 1,300 feet above the Shropshire Plain was an Iron Age fort and centre for Bronze Age copper mining. The area was also an important area for the Romans who mined lead in the area. Roman settlements were strung out along Watling Street on the line of Holyhead Road that forms the southern boundary of the site.

Coal mining started as early as the thirteenth century. The early pits exploited shallow deposits using adits – bell-shaped pits that hollowed out the coal deposit. The spoil from these pits was tipped to create the characteristic conical mounds around the brick-lined shaft. When the structure became unstable the pit would be abandoned and another shaft sunk nearby. There are signs of a number of this type of shaft in the centre of the TMC site. By the mid-eighteenth century mineshafts were sunk deeper and extended through underground galleries in search of ore and coal. This type of pit underlies most of the TMC site and the galleries are close to the surface under the playing fields to the west.

Ketley Bank

Pottersbank, East Ketley pre war

The southern part of the site in 1882



The presence of coal and iron ore made Telford an early centre for the industrial revolution. Abraham Darby perfected the process of smelting iron with coke instead of charcoal in 1708 in Coalbrookedale. The resulting more malleable iron was used for steam engines and bridge spans as symbolised by the Iron Bridge, built 1779-80 over the River Severn. As the industrial revolution developed, Shropshire lost its lead with the growth of cities such as Birmingham. However, the area remained an important mining and minerals area up to the early part of the 20th century. The last pit at Kemberton closed in 1966.

History of Ketley

The village of Ketley is located between Hadley and Oakengates on the historic artery of Watling Street. This ran from Rutupiae (Richborough in Kent) through Londinium, to Viroconium (now Wroxeter) west of Telford and on to Deva (Chester), making it the backbone of Roman England. It is not clear that there was a Roman settlement in the Ketley area. However, Ketley along with Bevelley, Pottersbank and Redlake are part of a string of villages that grew up along what remained the main road to Wales up to the completion of the M54. The intensity of settlement along the route can be seen on the historic maps of the area and indeed is still evident on the Telford figure ground plan (see page 14). The land on either site of the road was originally agricultural but from an early date was scarred by mine workings. There were a number of estates in the area. Abraham Darby's partner Richard Reynolds lived in Ketley Hall and, on a smaller scale, the area of the site now known as the Rose Garden was once the grounds of a house called the Poplars.

The most important archaeological artifact in the area is the inclined plain that climbs the hill to the south of Holyhead Road. This was built by William Reynolds in 1788 to link the mine workings on Ketley Hill to the canal that was cut next to Holyhead Road from the east. The inclined plain hauled canal boats up the hill to a smaller section of canal at a much higher level. This canal is shown as disused in the map of 1882 but was one of only a handful of inclined plains to be constructed in the country. Indeed the 1882 plan shows most of the mine workings to be disused by that time and mining has certainly not taken place since the early part of the 20th century. The main current extraction activity relates to brick clay and Blockleys have a major extraction facility to the north of the railway.

Since that time the site has lain fallow with the fields that escaped the collieries continuing to be used as grazing land. The eastern part of the site became a land fill operation in the 1970s and there was a smaller tip north of Pottersbank. The grounds of the Poplars House became a public park and the fields between this and the Ketley Cross Roads were bequeathed as playing fields. Facilities at one time included a lido and golf driving range, since closed and the Parkside Community Centre. The remainder of the site returned to nature.

1.3.2 A model new town

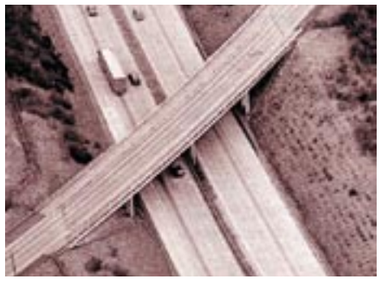
Telford was one of the Mark II New Towns designated in the 1960s. The Mark II new towns had been largely designated as a result of Abercrombie Plan for London to take overspill population after the war. The Mark II new towns were designated in the 1960s to accommodate overspill from the growing industrial cities.

The Mark II new towns included the expanded towns of Peterborough (1967), Northampton (1968) and Warrington (1968) and the new towns of Telford and Redditch (1965) in the Midlands, Runcorn (1964), Skelmesdale (1961) and Central Lancashire (1970) in the Northwest and Washington (1964) in the North East along with the largest, the new city of Milton Keynes (1967).

The history of mining in Shropshire, described in the previous section, had left the area as a 'moonscape, of mine workings and slag heaps'. New Town designation was therefore seen as a way of improving the environment of the area as well as attracting new jobs and economic activity to the area. The area was initially designated as Dawley New Town in 1963. This was subsequently expanded in 1968 to form a New town named after Thomas Telford.

The initial plans for Dawley New Town were drawn up by the John Madin Partnership. The Development Corporation started work in 1964 and early schemes included the industrial estates at Tweedale on the site of an old canal basin completed in 1965 and at Halesfield on the site of Kemberton Pit. The first housing estate was completed at Sutton Hill in 1966. The plan for the new town was based on a series of neighbourhood centres made up of local shops, medical practices, a church, pub, community building and two primary schools. All housing was to be within a third of a mile of one of these centres and the initial new town was divided into nine neighbourhoods each with a population of 8,000 people. The plan envisaged these neighbourhoods being linked by a new road system and that a new town centre would be developed once the population was sufficiently large to support it.

> Today the lessons provided by the new towns are being reassessed and used to help develop the government's Sustainable Communities Plan



The new towns were great laboratories for new thinking in town planning and housing design. The basis for this thinking was summed up Frank Gibbert writing in the Architectural Review in 1948: *'Making distinct separation between areas for work, homes and play, [by] connecting those areas with a road pattern free of building in which traffic can flow easily[...]. Industry is planned as a zone adjacent to the railway, with access to the regional road pattern: housing is arranged as a series of distinct neighbourhood units from 6,000 to 15,000 people, each with its own schools, shops, and other services; and the town centre, with its business, shopping, and civic groups, is planned near the railway station and industry.'1*

In 1968 the Dawley New Town designation was doubled in size to 7,790 hectares by taking in the historic centres of Wellington and Oakengates and was renamed Telford. In the mid-1970s work started on the town centre with the opening of Carrefour and Sainsburys stores and the completion of the M54. The second phase of the town centre with a full range of shops was opened by the Queen in the mid 1980s.

> TMC could be seen as the completion of the work started in the 1960s by the New Town Corporation.

During this period interest had grown in the industrial archaeology of the area and the heritage of Iron Bridge had been restored as an important tourist attraction. The area was designated in 1986 as a World Heritage Site by UNESCO. The Telford Development Corporation was wound up in 1991 and the assets transferred to the Commission for New Towns. This has since amalgamated with English Partnerships.

The Telford Millennium Community should be seen in the context of Telford's development as a new town. The site – and the collection of villages to the south – are a fragment of the pre-new town landscape. Together with Lawley and Lightmoor the site is one of the last remaining segments of the new town to be completed. TMC could therefore be seen as the completion of the work started by the New Town Corporation. The spirit of experimentation and innovation that underlay the new town movement is also central to the Millennium Communities Initiative. This is an important inspiration for the TMC scheme – a modern day version of new town design. However, it is also a warning of the dangers of innovation given the failure of some of the more daring new town estates such as Woodside. As the English Partnership's web site states; 'today the lessons provided by the new towns are being reassessed and used to help develop the government's Sustainable Communities Plan'. The TMC project is an opportunity to do this.

1.3.3 Telford today

Telford today is a town of 125,000 people and is the largest settlement in Shropshire. It is one of the success stories of the new town movement and since its foundation has succeeded in attracting people, investment and jobs and its town centre has grown into a sub-regional shopping centre.

The Borough of Telford and Wrekin has a population of 158,325 with 63,800 households. The area continues to attract population and grew by 17,000 or just over 10% between 1991 and 2001. The borough has a young population with 22.3% of the population being under 16 compared to 20% nationally. More than 95% of the population are white British while the largest ethnic minority is the Asian community that make up 3% of the population.

This growth is prompted by the employment opportunities in the area. In the ten years to 2001 the number of people employed in the borough grew by 21.7% – three times the rate nationally – with 1,328 new jobs per annum. This has led to high levels of employment with 63% of the population in work compared to 60.6% nationally. However, qualification levels are relatively low with only 14.2% of the population having a degree or above compared to nearly 20% nationally. Average gross weekly pay is just over £400/week some £50 less than national average.

Employment remains heavily based on manufacturing with 32% of the workforce employed in the automotive, electronic, and high-tech sectors mostly based on the large industrial estates such as Hortonwood and Stafford Park created as part of the original new town plan. The proportion of jobs in manufacturing has remained steady bucking the national trend of decline. Defence contractors like Alvis Vickers remain important but there has been a shift towards high-tech sectors such as plastics, office equipment, data processing and electronics. In recent years information technology companies have moved into the town such as Epson, Makita, NEC and Ricoh as part of the Wolverhampton-Telford High-tech corridor. Foreign-owned companies today employ 25% of the workforce. Service jobs have also expanded as government departments and call centres have opened in Telford.

> Telford is one of the success stories of the new town movement. Since its foundation it has succeeded in attracting people, investment and jobs.

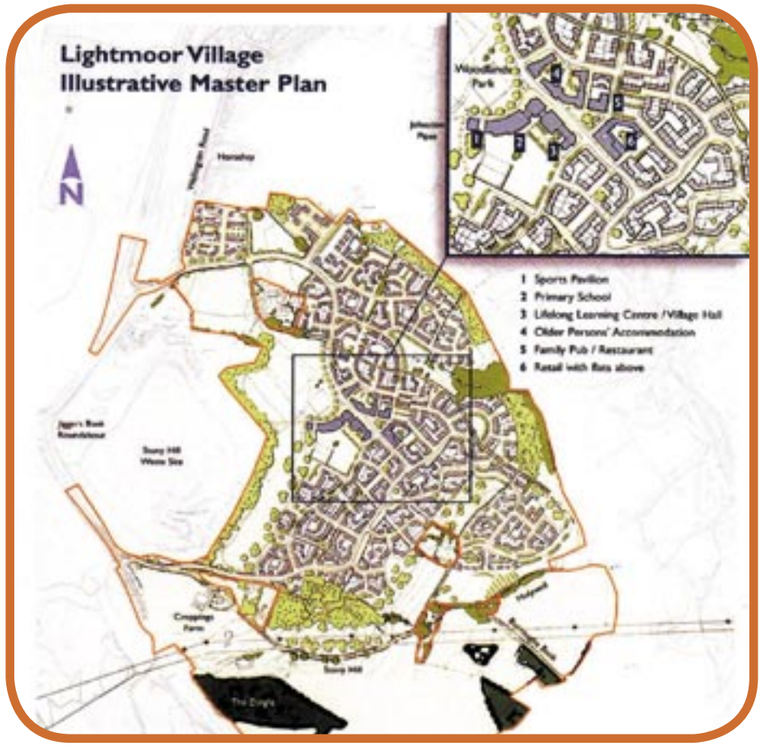
The housing market in Telford has a low proportion of council housing but about twice the national rate of registered social landlord housing. The home ownership rates at 68% are the same as the national average. The housing stock is, however, biased towards semi- detached and terraced housing with only 10% of the stock being flats, compared to just under 20% nationally. House prices in 2001 averaged £80,000 compared to £120,000 nationally. While prices have risen markedly in recent years housing in the area remains considerably cheaper that the surrounding rural areas or indeed the national average.

Development in Telford

Following the winding up of the New Town Corporation its land passed first to the Commission for New Towns and then to English Partnerships who now own 70% of the 240 hectares (600 acres) of land available for development in the borough. English Partnerships have been promoting housing and economic development on this land. In addition to TMC the two most significant schemes are:

Lightmoor: In 2002 planning permission was granted for the development of an urban village at Lightmoor. This is a partnership between Bourneville Development Ltd. and English Partnerships and is located in the southwest of Telford. The plans include 800 homes and flats, 25 percent of which will be social housing. The scheme has been masterplanned according to sustainable and ecological principles and includes shops, schools and leisure facilities. The aim is to create a twenty-first century equivalent of Bourneville in Birmingham and will be developed over the next 5-7 years.

Lawley: The local plan allocates a significant amount of residential and employment land for development in Lawley. This area is about 2 kilometres west of Telford town centre and is urban fringe in character. 800 dwellings have recently been developed in the area including the newly extended Lawley Village and the communities of Newdale, Lawley Bank, and Lawley Common surrounded by a 'green network', of structure planting. Further land has been reallocated from employment to residential use and has recently been the subject of an 'Enquiry by Design' masterplanning exercise by EDAW. This has been submitted for planning and is to be brought forward by a number of developers over the next decade.



1.3.4 The structure of Telford

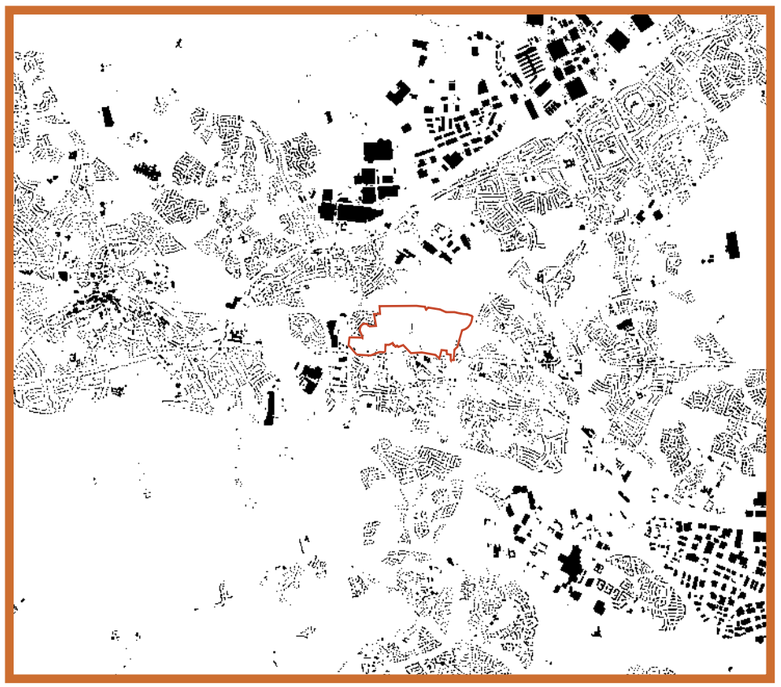


Figure Ground Plan: This illustrates the structure of the town; the density of development; the enclosure of space; and the urban grain.

The urban structure of Telford is characteristic of many new towns. It is based on a series of inward-looking neighbourhoods with the road network running in the landscaped belts that separate these neighbourhoods.

Urban Form

Figure ground plans (left) are useful tools in analysing urban form. The plans illustrate a number of aspects of urban form; the structure of the town; the density of development; the enclosure of space; and the urban grain.

Structure of the town: The figure ground plan shows the structure of the town as broadly 'Y' shaped with the Horton Wood industrial area in the angle of the 'Y'. The Stafford Park industrial area can be seen to the east, and northern part of Halesfield Industrial park can be seen in the bottom right of the plan. The Town Centre is in the lower part of the 'Y' and is cut off from the rest of the town by the M54 motorway. The residential parts of the town can then be seen as relatively self-contained neighbourhoods.

The network of towns and villages that existed before the new town can still be seen on the figure ground. The centres of Wellington, Dawley and Oakengates stand out against the otherwise low density town. What can also be seen is the extent to which the line of Watling Street can be clearly seen running through the town. This is the only major street that can be identified on the plan

> The network of towns and villages that existed before the new town can still be seen on the figure ground plan.

because, unlike the new town roads, it is characterised by frontage development and facilities such as pubs and shops.

Definition of space: In traditional urban areas the public realm of the town is defined by buildings creating welcoming human-scale spaces. These spaces ordinarily can be seen clearly on a figure ground plan yet there are virtually no streets or spaces identifiable on the Telford figure ground plan. The only exceptions are High Street in Dawley, Market Street in Oakengates and a number of streets in Wellington.

The housing areas are suburban in form from different periods. In the northwest of the town there are some garden city estates laid out along curving streets. There are also a number of unconventional layouts, probably from the 1970s with separate vehicle and pedestrian access as well as many more recent estates that lack any form whatsoever.

Density: In a traditional town, the density of development increases towards the centre and it is easy from the figure ground plan to identify the town centre. On the plan of Telford the town centre does not show clearly and the density of development is lower towards the centre than it is around the edge. Overall the density of the town is very low. This is partly due to the generous level of open space provision and partly the built form that is almost entirely detached and semi-detached in form.

Urban grain: The grain of development refers to the variety and interest in the urban form. Traditional towns tend to be built over a long period of time with a mix of different styles and character. The plan of Telford shows it to be a very homogenous place with a very coarse urban grain.

Movement

The movement plan (right) is a different way of analysing Telford. This shows the roads based on a simple hierarchy of routes with the trunk roads in green, the other main roads in brown and cul-de-sacs in yellow.

The plan of Telford shows a typical new town layout. This is based on a network of trunk roads that are free of frontage development and are linked by roundabouts. These create excellent road access throughout the town. However, most of the development has taken place on cul-de-sacs off these main routes. Compared to a traditional urban area, this creates an impermeable movement network making it difficult to move around the town especially by cycle and on foot. The excellent road links and poor permeability mean that movement between different parts of the town tends to take place by car.

The trunk road network – especially the M54 – also becomes a barrier

The trunk road network becomes a barrier to pedestrians and cyclists who are consigned to subways which, even with New Town maintenance levels, are unattractive to many people.

to pedestrians and cyclists who are consigned to subways which, even with New Town maintenance levels, are unattractive to many people (some are currently being filled in). This reinforces the tendency for most journeys to be by car on roads that run through landscape making it difficult for Telford to generate any vitality. This in turn means that facilities and shops are widely spaced, further reinforcing the need for movement by car.

Land use

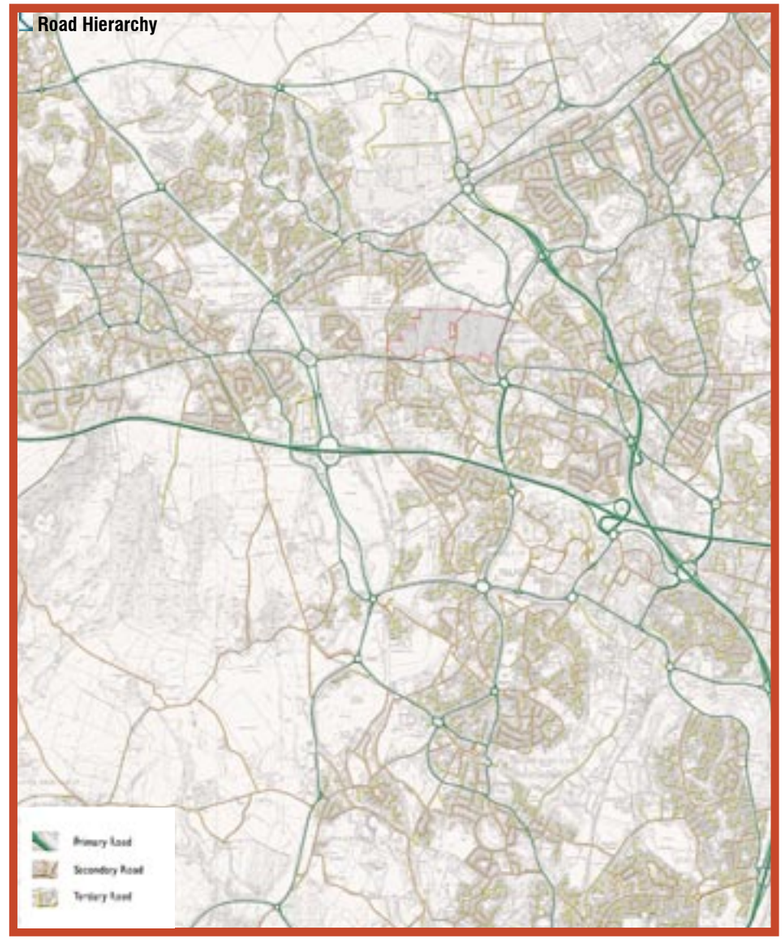
The land use plan reinforces this picture. It shows that uses in Telford have been zoned into residential and industrial areas. Most of the industry is in three large industrial estates rather being spread throughout the town. The land use plan further shows the fragmented nature of the residential areas and the lack of form and density in the town.

Local facilities: The facilities in the vicinity of the site are shown on the plan overleaf. Local facilities in Telford are widely spaced throughout the town with concentrations in the three former town centres of Wellington, Oakengates and Dawley.

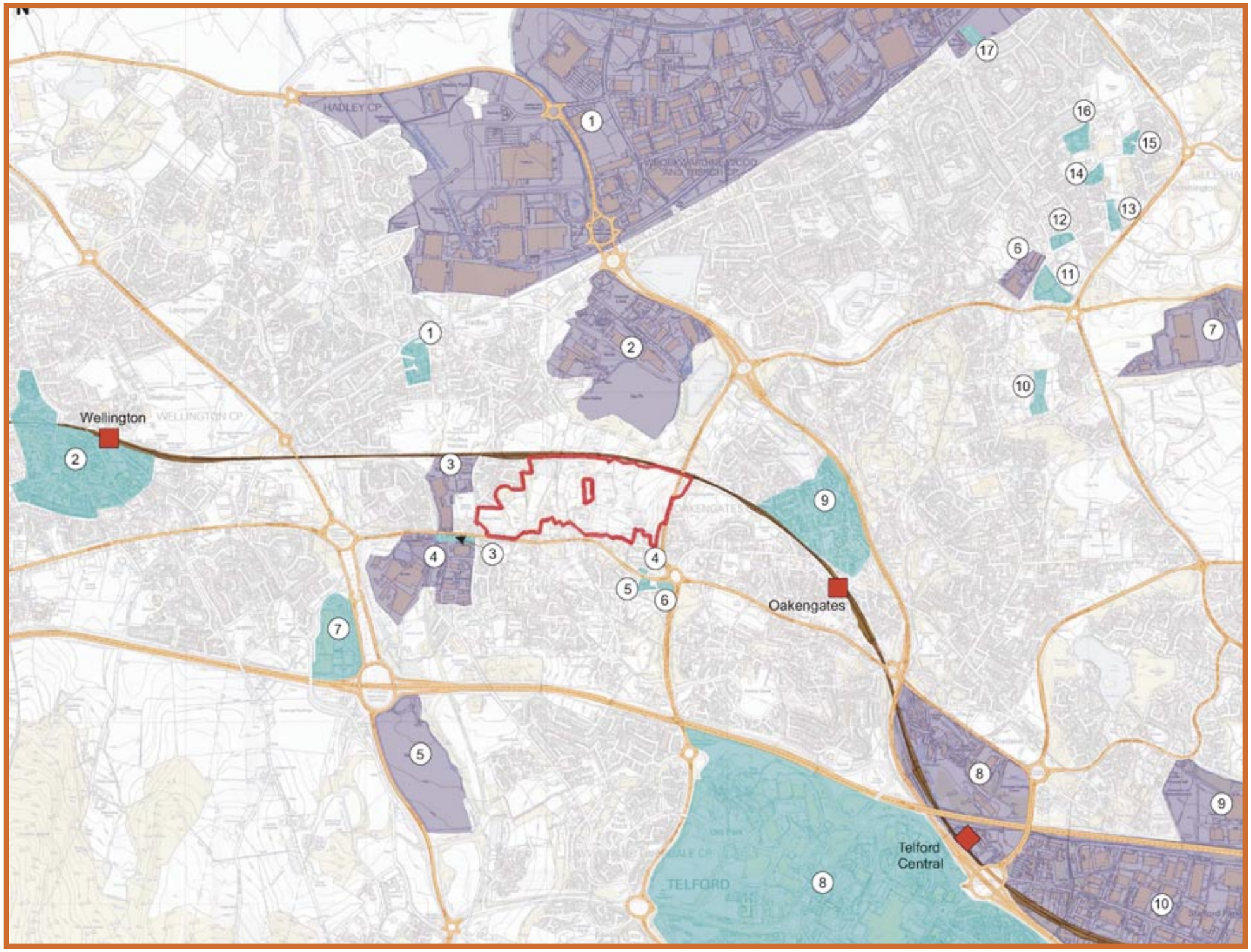
Within the vicinity of the site the main focus for facilities is around the junction of Station Road and Holyhead Road. Here there is a parade of local shops and a post office. The nearest school is Ketley Infant School on Holyhead Road and there is a further primary school in the southern part of Ketley along with a secondary school to the northwest. Higher order facilities such as medical centres, hospitals and libraries are available in either Wellington or Oakengates.

Neighbourhoods: A review of the neighbourhoods and identity areas of Telford has been undertaken. This shows that here are three levels to the hierarchy of neighbourhoods within the town (above right), the town centre which stands alone, the three engulfed towns of Wellington, Oakengates and Dawley and a series of residential neighbourhoods. Each of these neighbourhoods has an identity that is marked on plans and each also has a secondary school and local shops. In most of these neighbourhoods it is, however, difficult to locate the centre or focus for the neighbourhood.

Ketley is perhaps the most elusive of the neighbourhoods. The Ketley ward covers everything between the M54 and the railway. The name Ketley appears to the west of the site but the majority of the housing is to the south. There were a number of villages in this area, Ketley in the south west, Pottersbank where the school currently stands on Holyhead Road, Beveley, east of this, and Redlake to the south. As the figure ground plan shows, the area is one of the most varied in Telford with the patterns of the old villages remaining. In as much as it has a centre, the modern focus for Ketley is the junction of Wellington Road and Holyhead Road. There is, however, very little housing around this centre and the focus of the community is perhaps to the east of this.



Existing retail and commercial uses in the wider area



Key

Site
Main Roads
Railway Line
Industry

1 Hadley Park Industrial Estate
2 Trench Lock Industrial Estate
3 Waterloo Bridge Industrial Estate
4 Ketley Industrial Estate
5 Newdale Industrial Estate
6 St George's Road Industrial Estate
7 Dennington Wood Industrial Estate
8 Stafford Park Industrial Estate
9 Stafford Park Industrial Estate
10 Stafford Park Industrial Estate

Retail

1 Hadley Centre incl. Grocers, butchers, newsagents, off licence, fish and chip shop etc
2 Wellington Centre incl. Morrisons Superstore and Wellington Market (the oldest market in the area at over 750 years old)
3 Local retail
4 Citroen Dealership
5 Furniture Store
6 Peugeot Dealership
7 Wellington Retail Park incl. Tesco, Homebase, Matalan, Macdonalds, KFC and Netto
8 Telford Central incl. **Telford Shopping Centre** with 145 shops (all the major national retailers present), **Forge Retail Park** incl. Sainsbury's, Powerhouse, TK Max, PC World, Curry's, Holiday Hypermarket, Car Phone Warehouse and Cannons Health Club, **Telford Bridge Retail Park** incl. B&Q, Halfords, Comet, Argos, MFI and Pizza Hut
9 Oakengates Centre
10 Auction Mart
11 ASDA Superstore
12 Local retail
13 Local Retail
14 Local Retail
15 Local Retail
16 Local Retail
17 ALDI Superstore

1.4 Site audit

The TMC site is one of the most complicated in Telford. As we described above in the history of the town it was at the centre of the early industrial revolution and the landscape became scarred by mineworkings and spoil heaps. The TMC site is typical of the landscape created. There are 29 identified mine shafts on the site and most of the surface is covered by colliery spoil. In the western parts of the site this has been land formed and lies underneath the playing fields and former golf driving range. In the central parts of the site the spoil mounds retain their original conical form creating a landscape that is dramatic but difficult to develop.

This historic legacy has been exacerbated by two more recent tips, Beveley Glen and Pottersbank, which cannot be developed and are subject to an exclusion zone where development is not permitted.

The TMC site offers a unique landscape with the potential to embrace the ecology and landform to give the scheme a unique identity and create an exemplar new development.

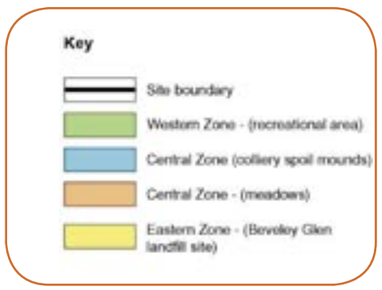
Most of the site has been fallow for many decades and has become a locally important landscape and wildlife habitat. This includes a number of habitats and species that are now protected.

The TMC site therefore offers a unique landscape and there is the potential to embrace the ecology and landform to give the scheme a unique identity and also to create an exemplar for how these issues can be dealt with in new development.

The technical and site constraints have been fully explored as part of the masterplanning process. The results of this are set out in technical reports by Entec and Capita Symonds and are covered in the Environmental and Transport Assessments. In the following section we will not repeat this detailed information. However, we summarise the main points that have arisen from the four key issues: ground conditions, landscape, ecology and access. These are brought together in a plan at the end of this section to show the extent of land that is developable.

1.4.1 Topography and ground conditions

Site zones



One of the key constraints that has affected the masterplanning of the site has been ground conditions. This has been assessed by Entec and includes ground stability, the legacy of mining, water and contamination. These affect the western, central and eastern zones of the site in different ways. The western zone comprises playing fields and a former golf driving range. The historic maps indicate that the Rose Garden was once the grounds of a house called the Poplars and so stands on original ground but that the rest of the area was covered with colliery spoil mounds. All of these except the Rose Garden mound were regraded in the 1970s to create the playing fields and the driving range. The driving range was remodelled as a gently sloping bowl with surface drainage collecting in the ponds to the north.

The central zone comprises numerous mounds of colliery spoil tipped on to the original ground surface.

> The site has a number of colliery spoil mounds tipped onto the ground surface from coal mining that took place on the site.

The original ground is defined by a flat meadow at an elevation of 108-116 metres AOD. This meadow remains in places (shown in brown on the plan to the left) and has the character of fields with hedgerows and mature trees. The remainder of the area is characterised with mounds that are typically steep-sided and flat topped with summits around 118-120 metres AOD.

The eastern zone is defined by Beveley Glen landfill. The landfill forms a mound with a top elevation of 125-130 metres AOD. The west and northwest flank is fairly steep and high, rising from a base elevation of 100-115 metres AOD. The landfill was constructed between 1981-1987 on an area that had previously been disturbed by mining activity. It was constructed using a 'land raising' construction technique.

The majority of the site is vegetated with grass, shrubs and trees, and the only formal road onto the site is a small lane providing access to Glen Cottages.

Drainage

The site is drained by two small streams flowing from south to north in the central area. The playing fields in the west are drained into a public sewer in Waterloo Road. A deep surface water sewer passes beneath Beveley Glen landfill. This sewer does not drain any part of the site. The site also contains areas of standing water located in hollows in the land surface.

Ground conditions

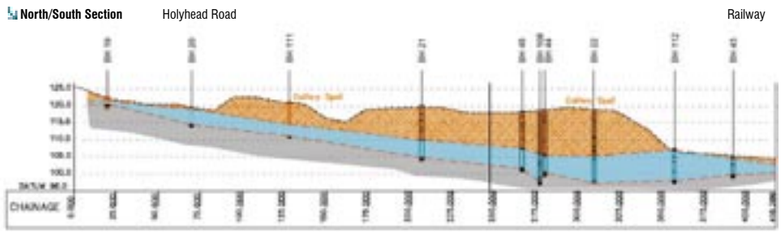
Geological information indicates the site is largely composed of Glacial Till or Boulder Clay overlying Middle and Upper Coal Measures rocks. The southwest corner is underlain by Middle Coal Measures. Only the Middle Coal Measures were productive for coal mining. In general, bedrock depths are around 10 metres below ground level.

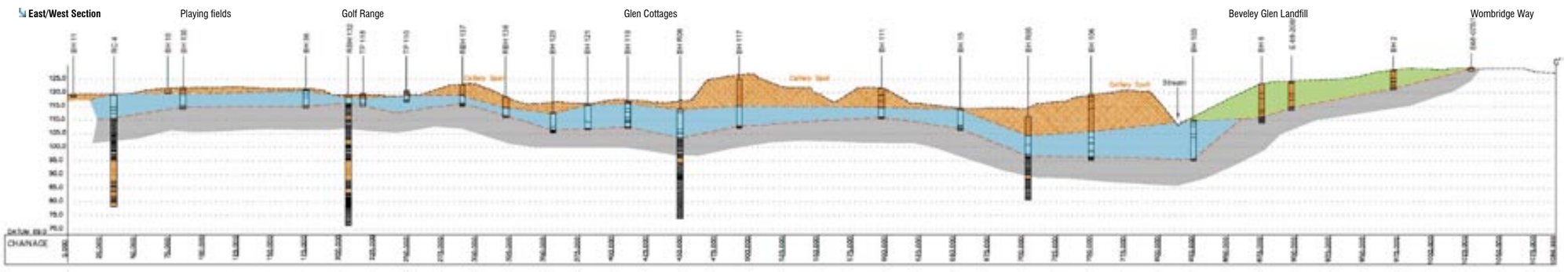
Mining

The site has a number of colliery spoil mounds tipped onto the ground surface from coal mining that took place on the site. The abandonment of the mines was document by the Coal Authority and the British Geological Survey for the entire site. Consequently, more than 20 mine shafts have been located and mapped. Most of these have been grouted and will be capped off with a concrete slab. Once

done there can be no buildings within a 45 degree cone from the slab to the surface. The work will disturb a further 5m radius. The size of the exclusion zone depends on the ground level but it has been assumed that we should leave a 20m radius exclusion zone around the pits for safety.

Levels of cadmium and arsenic in the ground are low but above levels suitable for gardens. The regraded spoil areas therefore need to be capped by 600mm of soil. The spoil is currently unsuitable for foundations and needs to be graded to make it load-bearing. This re-engineering of the made ground provides the opportunity to reshape the landscape. There are shallow workings in the western part of the site that present a risk of subsidence. The extensive works in the west are shallow enough to warrant grouting – potentially adding £11,000 per home/plot. The workings to the east are likely to be deep enough to cause no problems but this is yet to be confirmed.





References:

- Land Reclamation Issues Report - Entec - 28th October 2003

Top original ground surface contours
- Site boundary
- Original ground level beneath colliery spoil (approximate)

Below conjectured rockhead contours
- Site boundary
- Rockhead contour (mAOD)

Location of mine shafts
- Mine shaft to be treated or condition to be ascertained
- Mine shaft location to be ascertained
- Stand-off radius
- Buildable area

North/South Section
- Made Ground
- Made Ground (Beveley Glen Landfill)
- Glacial Drift
- Coal Measures (Bedrock)

1.4.2 Landscape and recreation

The site has been assessed by Entec from a landscape as well as an ecological perspective. Ecology is dealt with in the following section, here we deal with the main constraints and opportunities created by the site's landscape features.

TMC is a 'green' brownfield site, which best describes the condition of much of the landscape in East Ketley. It retains some pre-industrial landscape features such as hedgerows and patches of neutral meadowland, but it is strongly influenced by the topographic legacy of mining.

The site falls northwards from the ridgeline that runs east-west through Ketleyhill, Red Lake and Ketley Bank. However, the mining spoil heaps and the Beveley Glen Tip provide considerable local topographical variation, which affects aspect, views, and vegetation patterns.

The playing fields will be retained in-situ as part of a proposed new community park to be designed with the community.

Vegetation

The site is rich in important vegetation resources:

- **Beveley Glen Woodland:** A wooded valley below Beveley Glen tip that includes a swathe of native trees with a canopy of up to 15m which are about seventy years in age.

- **Meadows:** In the north of the site a number of majestic willows and mature poplars up to 20m in height shelter a meadow rich with wildflowers.

- **Rose Garden trees:** The area around the Rose Garden has a number of mature trees that are both a visual focus and historical reference for the wider area. These include mature oaks, maples, ash, holly, poplars, cherry, cypress and a monkey puzzle tree. A loose line of ornamental poplars, plums, cypresses, sycamores, cherries and ash trees mark the 1.5m level change to the east of the present football pitches. Their canopy reaches up to 20m high and they create a visual backdrop to the western end of the site.

- **Hedgerows:** To the south-east of the site two sections of overgrown hedgerows provide a visual screen and a link with the site's pre-industrial past, whilst in the central part there are lines of mature trees and shrubs which mark old hedgerow lines which have grown out. These form visual and functional links between the wooded area in the south of the site and the mosaic of meadow, scrub ponds and woodland that runs along the northern boundary of the site beside the railway.

Landscape assets and constraints

Beveley Glen Tip: The topography and the depth of top soil is likely to restrict tree planting opportunities. However, this is a potential location for the relocation of acid grassland.

Spoil Mounds: The two central colliery spoil mounds; 'Badger Hill' and the 'Rabbit' have been colonised by birch trees, oak, rowan, and goat willow. The canopy of these trees reaches 18m. These mounds merit retention and would benefit from woodland management to preserve and increase diversity.

Japanese Knotweed: The TEP Survey identified six locations of Japanese Knotweed. Under the Wildlife and Countryside Act 1981 it is an offence to cause this to spread. A strategy of eradication is ongoing.

The Rose Garden: Parts are in poor condition. The rose beds are almost empty, several of the mature sycamores are diseased or damaged by fire. There are features such as the gates and the mature trees that merit retention, however, the area as a whole is in need of substantial investment.

Recreation

The main element providing formal recreation opportunities is the playing fields. These accommodate two football pitches, although only one is currently laid out. The area is covered by a restrictive covenant that ensures that the playing fields remain a public amenity. Changing facilities are provided at the Parkside Centre.

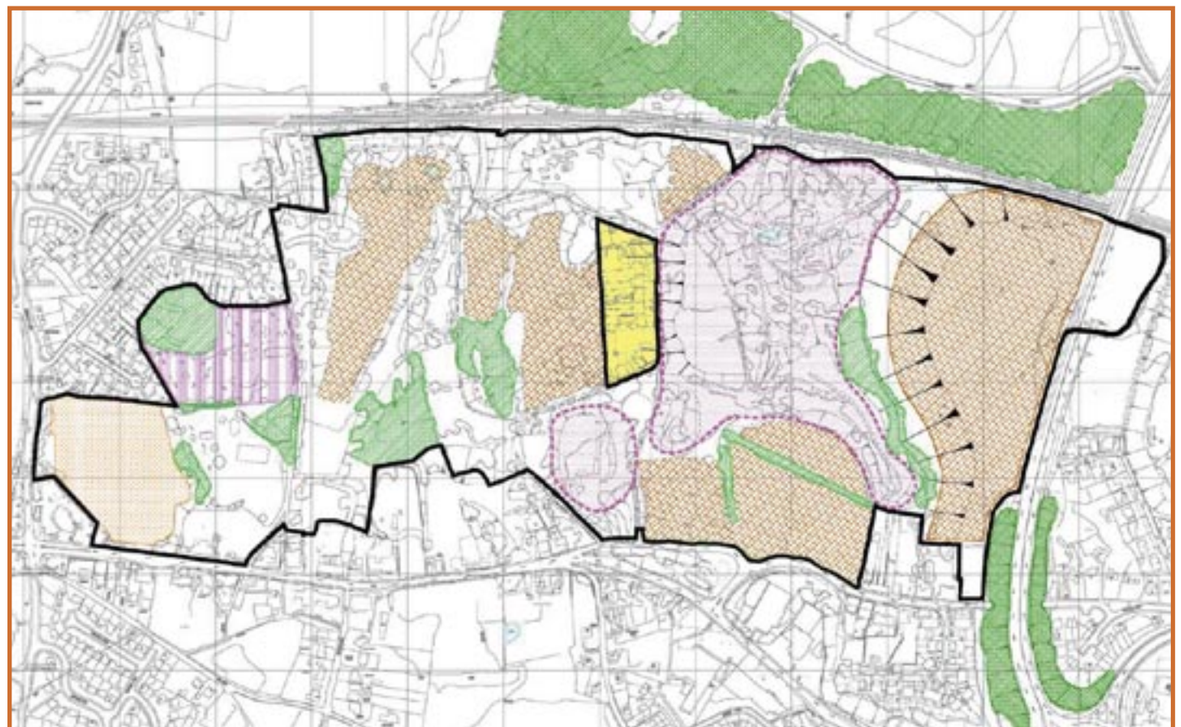
There is an established children's play area next to the Rose Garden. In accordance with local and national standards there will be a requirement for

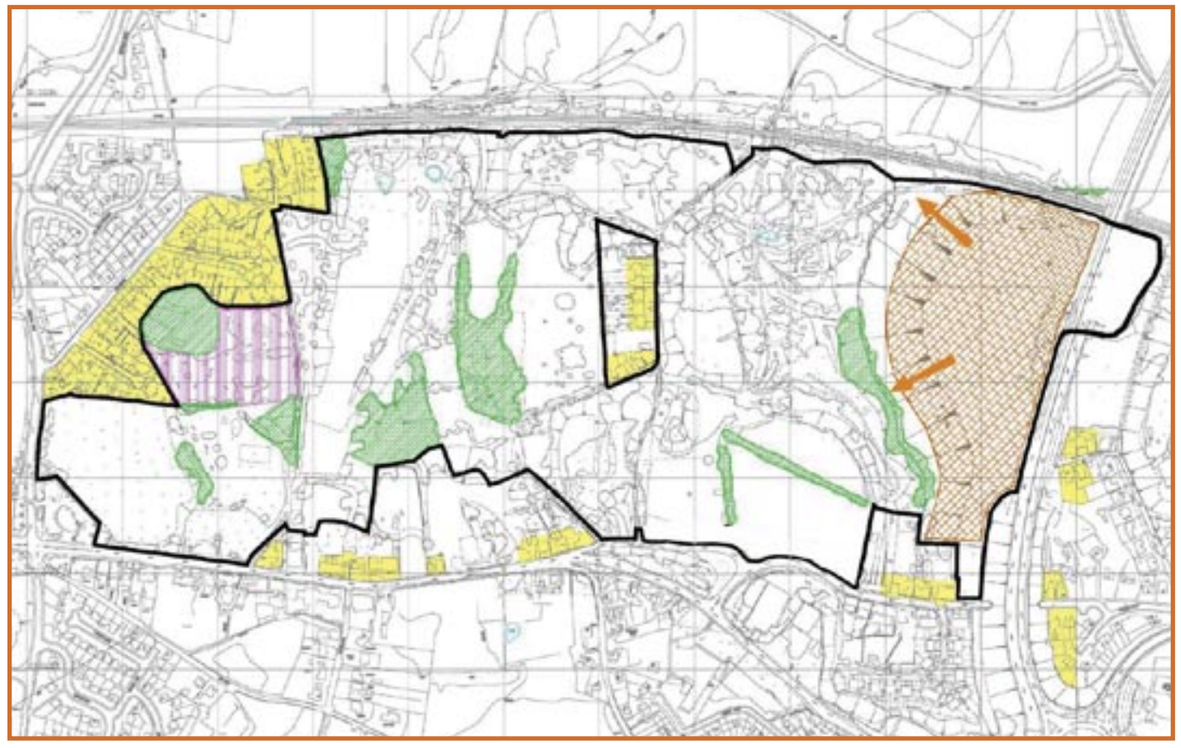
two local play areas and one neighbourhood play area within the scheme. The scheme will therefore need to replace this provision as well as catering for the new residents.

There are a number of Public Rights of Way (PRoW) and RUPPS across the site. Horse riding is well established and there is a history of requests to formalise tracks on the site as bridleways to facilitate this activity. There are also numerous informal footpaths throughout the site. However, only one PROW (footpath 108) is lighted and overlooked by nearby houses, and as such can be considered safe.

The wider visual context:

From the neighbouring areas there are only limited views into the site. The most widely available views are those from the elevated sections of Holyhead Road. There are also more limited views from the Wombridge Way and Hill Top Road area to the east. In these views the present site with extensive woodland scrub cover forms the middle ground, creating a strong visual link with the wider countryside, including in views from the east, the wooded slopes of the Wrekin. Views from the immediate west tend to be limited to the playing fields with the main part of the site providing a wooded backdrop due to the mature trees in and around the Rose Garden. In the more widely available views from countryside west and north of the town the site is not readily distinguishable as a separate visual component with the exception of the line of mature Lombardy poplar trees along Beveley Road.





References:

- Cite Entec Technical report
- Landscape Resources
- Landscape Constraints

1.4.3 Ecology

The site is rich in ecological resources. This is important, not just because of the importance of preserving flora and fauna on the site but for the human benefits of creating wildlife-rich green space within built environments. Research shows that people find such areas more attractive and fulfilling places to live and the incorporation of nature conservation objectives into the development plan should lead to long-term benefits to the inhabitants of the TMC.

Several habitats and species place constraints on, and provide opportunities for the development of the site, however, some have more major implications than others. A wide variety of faunal species use the site. Of particular note are great crested newts, bats, common lizards, wintering and breeding birds, butterflies and other terrestrial invertebrates. Badgers have used the site historically although they are not present currently. Valuable habitats and species of flora will also be given key consideration. They are the areas of lowland heathland, acid grassland, broad-leaved woodland, grassland with orchid and ponds.

Several habitats and species place constraints on the development of the site. Of particular note are great crested newts, bats, common lizards, wintering and breeding birds, butterflies and terrestrial invertebrates.

Protected species

A number of the species that use the site are protected by National and European legislation. Great crested newts, bats, reptiles, badgers and many wild birds (including all breeding birds) receive protection under the Wildlife and Countryside Act (1981), which is extended by the Countryside Rights of Way (CroW) Act 2000. Great crested newts and bats are also covered by the Habitats Regulations 1994. These require that the species be maintained at favourable conservation status and works that may cause an offence under the legislation against these species can only be undertaken if they are licensed by DEFRA. Badgers are also protected under the Protection of Badgers Act 1992, which require that work within 30m of a sett must be licensed by English Nature.

- **Great Crested Newts:** These have been recorded in the ponds at the northern end of the former golf driving range. The maximum number recorded on site was 61, which is classed as a medium population size using English Nature guidelines. There are also unconfirmed reports of great crested newts in ponds in the gardens of Glen Cottages and in the gardens of the houses on the western boundary of the site nearest the playing fields. This has been taken into consideration in the masterplan.

- **Bats:** Pipistrelle (Pipistrellus pipistrellus) and noctule (Nyala noctula) have been recorded foraging over the site. No roosts have been found although potentially suitable trees have been identified. Bats tend to fly and forage along linear features in the landscape, e.g. along hedges, tree-lines, and along woodland edges. The retention of such features will benefit bats.

- **Badgers:** There has been one badger sett on site that comprised of five holes. The sett is currently not active and the extent of use of the site by badgers remains unclear.

- **Reptiles:** Common lizards are present on site. 6 adults were seen by one recorder on site in one day, which using HGBI Guidance, means that a medium population I present. The species was found at one location towards the northern edge of the site and at six locations to the southeast of the driving range, predominantly in rough grassland and heath. There are unconfirmed sightings of grass snakes on site. All reptiles will need to be removed from suitable habitat affected by development.

References:

- Cite Entec Technical report

- **Birds:** Numerous varieties of birds have been recorded on the site, including some of conservation interest such as the kestrel, song thrush, bullfinch, house sparrow, starling, linnet.

Provided that a rich mosaic of woodland, individual trees, scrub, hedgerow and open grassland is maintained on the site it is likely that the same species will continue to be attracted to the site. Although the numbers of some of these species may reduce, common garden birds like the robin and blue tit, house sparrow and blackbird may even increase in number.

Terrestrial invertebrates

A survey was carried out on site in September 2003 that found the site to be of interest for invertebrates associated with brownfield sites. The very thin layer of soil and lack of nutrients, is key to the interest especially in the central zone of the site. Four nationally scarce species were recorded. Parts of the site are of some nature conservation interest for invertebrates. In particular areas of thin soil cover on the coal spoil and presence of dry grassland, and healthy vegetation support that interest. Additionally the site supports dingy skipper butterfly, which is a regionally important species.

Important habitats

The variety of habitats and species are referred to as biodiversity. No one organism lives on its own. Each contributes to the balance and survival of the planet. The UK Biodiversity Action Plan (UKBAP) is the UK's initiative to maintain and enhance biodiversity. English Nature and other environmental organisations are committed to achieving the plan's conservation goals over the next twenty years. Local biodiversity is also an important consideration.

Areas of lowland heathland (which is a UK and local BAP habitat type) have been identified on site, covering around 0.5ha. About 0.5ha of acid grassland have also been identified. This habitat is covered by a Broad Habitat plan in the UKBAP, and is included in Telford and Wrekin Local BAP in the 'unimproved grassland' action plan as 'acidic coal spoil linked to past mining activity in the Telford area'. In addition areas of broad-leaved woodland on site are also considered to be of conservation value.

Flora

Three plant species on the site are of local interest:

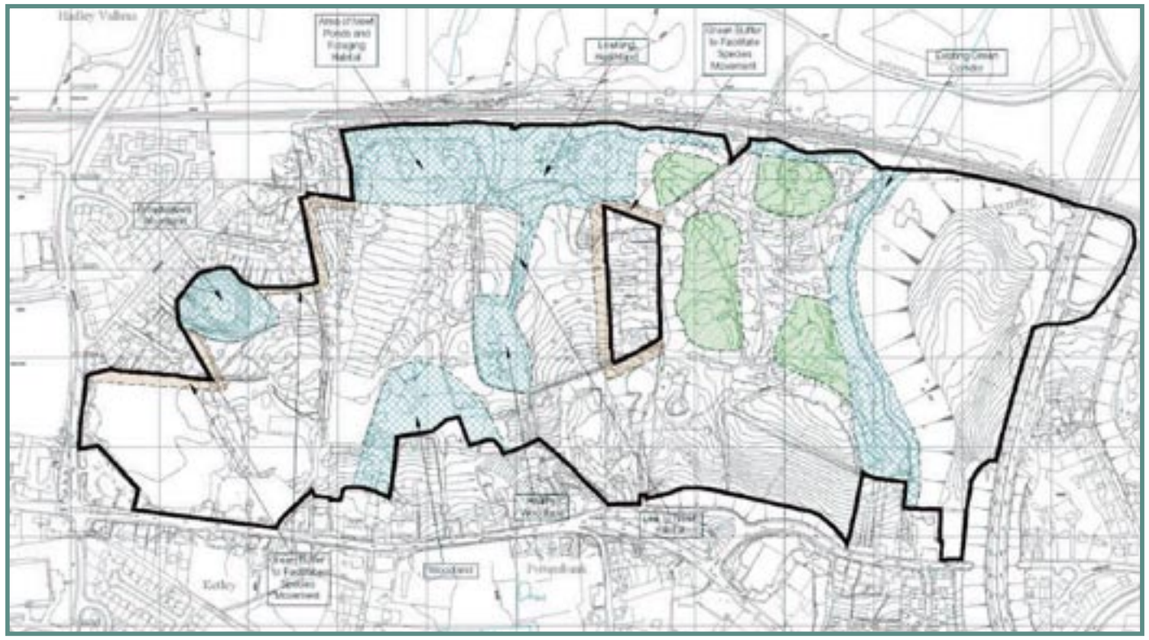
- **Crowfoot:** Thread-leaved water crowfoot was found in 3 locations in 2003 (ponds 1 and 2 and the area of former pond 5).

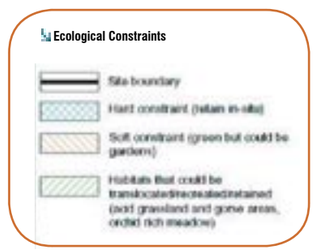
- **Early hairgrass:** This species was found in 3 locations in 2003 (2 locations to the north of pond 5 and in the heathland on the northern edge of the site).

- **Red bartsia:** This species was formally recorded from 1 location in 2003 but is thought to be scattered along the edges of some of the paths across the pit mound area.

Three orchid species grow on the site; southern marsh orchid, common spotted orchid, and bee orchid. The orchid-rich meadow brings interest to the site although the species themselves are not of particular nature conservation value.

Creating and retaining larger blocks of habitat in the development is likely to be of more nature conservation value than several small ones. Small areas tend to be more vulnerable; therefore the fauna that inhabit these spaces are also more vulnerable. Habitat areas will be linked by 'green corridors' of hedgerows, grasslands and watercourses to enable species to migrate throughout the site. Hedges will be retained where possible and gaps filled in. It will be important to incorporate berry and seed producing species that provide food sources for birds, small mammals and badgers while flower-rich species attract insects that are in turn of value to reptiles and bats. Existing ponds supporting newts must be retained but additional ponds will also benefit local biodiversity.





1.4.4 Movement and linkages

In the preparation of the masterplan Capita Symonds have undertaken extensive work and consultation with the community to agree access arrangements to the site. These include highway access, public transport and safe routes to school.

Road access

Eight options have been explored for road access:

- **Waterloo Road:** An access across the playing fields was technically possible and worked well in traffic terms but was rejected because of the impact on the playing fields.

- **Holyhead Road - Parkside Centre:** A junction next to the Parkside Centre can be constructed without third party land and is technically possible. It could form part of an alternative route for buses. There is, however, concern from residents that the road in this location has a problem with traffic speed and accidents. This option will put more traffic into Ketley Cross Roads but will divert traffic away from the school. On balance it was decided to include this access.

- **Holyhead Road - Unicorn Pub:** A junction could be provided onto Holyhead Road to the east of the Unicorn Pub. This is technically difficult because of the levels and would require the closure of Beveley Road to through-traffic and has not been pursued.

It has been agreed that three vehicular accesses should serve the site, the junction next to the Parkside Centre, an access at the existing Beveley Road junction and the provision of an access via Wombridge Way.

- **Beveley Road:** An alternative is to use the existing junction at Beveley Road by upgrading the junction. This would help to calm Holyhead Road and allow a bus loop through the site. It has therefore been included in the scheme.

- **Wombridge Way:** An access onto Wombridge Way has been explored, which would have the benefit of reducing traffic levels onto Holyhead Road by providing a direct link to the north. However, there are significant technical difficulties bridging the height differences between Wombridge Way and the rest of the site especially since it is not possible to cut into the tip.

- **Existing landfill access off Wombridge Way:** There is an existing access from Wombridge Way. This has a left turn in/left turn out arrangement on the opposite side of the road and reaches the site through the railway bridge. This is restricted but could provide for signalised traffic. Given the problems of a direct access this has been included as a tertiary access to the site, especially for construction traffic.

- **Access to the north:** The narrow underbridge of the railway leads to the north. There is the possibility of improving this route to connect to Hadley Road. However, no guarantee of a vehicular route being available

Road access options

References:

- Transport Assessment - Capita Symonds

can be made. This route could, however, be important for walkers or cyclists.

- **Broadway:** A lane connects the site in the northeast corner via Broadway onto Waterloo Road. The nature of the lane and the design of Broadway is considered unsuitable for vehicular access, but suitable for pedestrians and cyclists.

Following discussions with the CCG and the Highway Authority it has been agreed that three vehicular accesses should serve the site, the junction next to the Parkside Centre, an access at the existing Beveley Road junction and the provision of an access via Wombridge Way. The first two will be the main points of access and will be connected by a link road, which is capable of carrying buses.

Off-site highway works

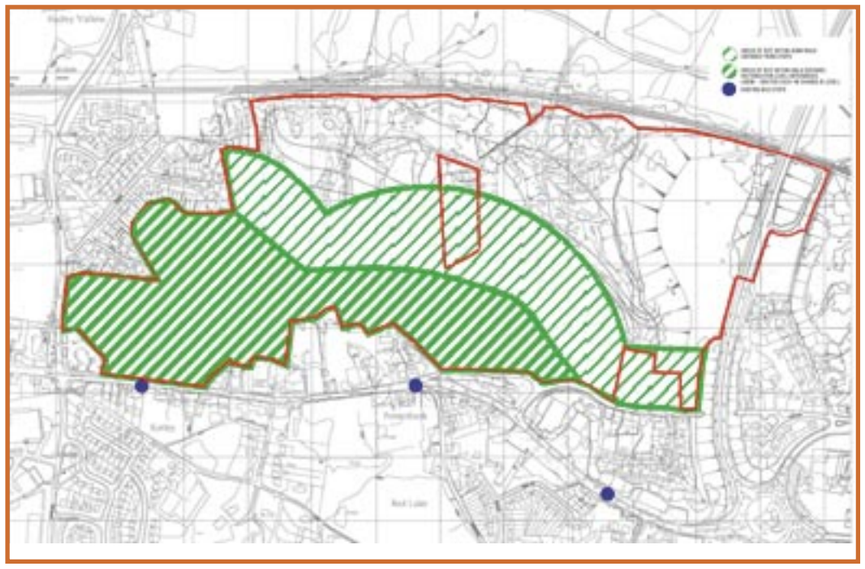
There has been significant debate about the future operation of the Ketley Crossroads. Telford and Wrekin Council's policy is to downgrade both Holyhead Road and Waterloo Road, thereby reducing the volume of traffic through the cross roads as indeed has happened over recent years. However, there is concern that it is still a source of congestion and accidents. Improvements to the junction have therefore been put forward by Capita Symonds along with traffic calming measures on Holyhead Road between the two proposed site access junctions on Holyhead Road.

Public transport

Government guidance on access to public transport states that no home should be more than 400 metres from a bus stop. For every metre change in height 10 metres is deducted from this distance. As a Millennium Community the scheme must meet this standard.

Currently there are excellent bus services on Holyhead Road with the 44 route running frequently into the town centre. However, the existing bus stops are too far away from parts of the site. A number of options have therefore been explored including the diversion of the 44 route into the site, the diversion of the less frequent 891/892/893 routes, the creation of a new service and measures such as a bus/taxi service and free tickets. Meetings have been held with Arriva and the Council to discuss the rerouting of the 44 which is possible although the idea is resisted by some of the community.

Distance to existing bus stops



It has therefore been agreed that the penetration of bus services through the site should not be precluded between the two access points on Holyhead Road.

It has also been agreed that an innovative community-based minibus service should be provided with an 'alternative' fuelled vehicle in particular linking with local employment areas.

There has also been discussion of the former rail halt to the north of the site. The reopening of this is unlikely to be commercially viable in the medium term but it has been agreed that the masterplan should not preclude this in the future.

Safer routes to schools

The future of the existing schools on Holyhead Road has been debated throughout the masterplanning process. However, the masterplan is able to provide for safe and convenient pedestrian and cycle routes across Holyhead Road to the existing school buildings.

1.4.5 Constraints and opportunities

While the issues described in this section include some tremendous opportunities to create a truly distinctive development they also represent constraints. The issues have therefore been brought together on the plan on the facing page to determine the developable areas of the site. The main determinants of this are:

The issues have been brought together on the plan on the facing page to determine the developable areas of the site.

- **Mine workings:** The spoil mounds and shallow workings are not a bar on development. However, the remaining pit heads cannot be built upon even when capped. The plan shows a 25m stand-off around each of the pits. There is unfortunately a discrepancy between the information held by English Partnerships and the Coal Authority. Both have been shown and have been avoided as part of the masterplanning process.

- Tips: We have explored the prospect of building on Beveley tip as has been done elsewhere. However, the difficulties have caused this to discounted. There is a 250m consultation zone around the both Beveley and Pottersbank tips and a 50m exclusion zone. Land within the 50m zone has been excluded from the developable area.

- **Ecology:** The areas of ecological constraint shown on the plan on page 19 have been agreed with the community. The green arc to the north is therefore predominantly excluded from development along with the Rabbit and Badger Mounds, the Rose Garden Mound and the Beveley Glen Valley. Other areas of nature conservation value (mainly comprising acid grassland and associated habitats) will be translocated to Beveley Glen Tip.

- **Landscape value:** As a result of discussions with the community the ecological area has been expanded to include features that are of local significance notably the left hand ‘ear’ of the Rabbit.

- **Ecological corridor:** Due to the likelihood of there being newts in the back gardens of Broadway and Glen Cottages, corridor areas have been allowed in the design linking these gardens back to the ponds. These can potentially be included in back gardens but should be free of development.

- **Recreation:** Following extensive discussions with the community it has been agreed that the playing fields should lie outside the developable area but that the Rose Garden can be developed provided it is for the school (allowing the trees and features to be retained).

This leaves 16.5ha of developable land. It is this area that has formed the basis for the masterplanning exercise described in the next section.


Red Lake
Developable Area
Hard areas
Ecology
Ecology areas added during the workshop
Ecology corridors
Hatched - Habitat that could be translocated
Community value
Recreational value
Sacred trees
Pit heads
Landfill - hatched 50m zone
Area affected by shallow mines

DESIGN STATEMENT