View of the lake in the Apsley Triangle
1.0 Background

1.1 Project Introduction

BDP has been commissioned by Dacorum Borough Council to undertake a feasibility study into the greenspace to the south of Hemel Hempstead’s Town Centre in order to assess the constraints and opportunities for an ‘Urban Park’ to serve local residents and visitors to the area.

The partners in the Feasibility Study are Dacorum Borough Council, The Box Moor Trust as primary land owners and consultants BDP.

The initiative has come at this time as part of Dacorum Borough Council’s Hemel 2020 Vision, which sets out the ambition for an Urban Park in the Two Waters area. The space is important in Hemel Hempstead and has some unique qualities. In particular through the Moors, the Grand Union Canal, the combination of which is an extreme rarity so close to a Town Centre.

This study first explores the area’s environment, use, and context as the southern gateway to Hemel Hempstead Town Centre and incorporates residents, landowners and stakeholders priorities. Through this process, a range of enhancements and options for potential changes are identified and tested, leading to a final set of recommendations.

1.2 The Aims of the Project

To build on the natural assets and provide a renewed and more inviting open space facility for people to visit and enjoy.

To engage with the local community in the development of proposals.

To mark and announce the southern entrance into Hemel Hempstead Town Centre through an attractive ‘green gateway’.

To provide a sense of progression along the gateway corridor to and from the southern end of the Town Centre.

To provide a green, open space circulation route into and through the town, and identify links beyond, with a clear sense of connection and continuity between the different sections and the wider green space network.

To provide an accessible and welcoming environment within the public domain, marking entrances, identifying routes for pedestrians and cyclists and improving infrastructure.

To provide an asset for exercise and recreation.

To provide an educational resource with the opportunity for training and the creation of jobs, particularly those associated with nature, the environment and sustainability.

To protect and improve biodiversity through the development and management of a range of freshwater and terrestrial habitats.

To make visible and legible the relationships between the watercourses and the industrial and social history of the landscape.

To provide high quality green and waterside spaces as a setting for new development and redevelopment on the edge of the town.

To improve visitor moorings on the canal towpath and to enhance accessibility to the Town Centre.

1.3 Hemel 2020 Vision and the ‘Urban Park’ Project

The Hemel 2020 initiative aims to forge and strengthen partnerships, be a vehicle for securing external funding and provide a framework for important plans and programmes like Dacorum’s Community Plan and Local Development Documents. Essentially, it is a vision to deliver regeneration opportunities and improve the quality of life in Hemel Hempstead.

The Hemel 2020 Vision document includes a specific proposal from which the study originates. This is to create a new urban park at Two Waters, linked to existing open space and potentially extending to the southern side of the Town Centre.

However, the title of this document and the focus of the feasibility study has been adjusted during the project process. Through discussions with stakeholders and various consultees, the notion of creating or rebranding the Two Waters area as an ‘urban park’ was abandoned as a significant proportion of the study area is Moorland, that despite often being used for leisure purposes, is considered to be a ‘working countryside’ as opposed to recreational parkland. Therefore the original idea of labelling these unique natural grazed areas as an ‘urban park’ is something of a misnomer which has led to this study being referred to under the title ‘Two Waters Open Space Feasibility Study’ and not the Two Waters Urban Park.
1.4 What is a Feasibility Study?

Simply put, a feasibility study looks at the viability of an idea with an emphasis on identifying potential constraints and opportunities. These are then studied with an analysis of the current mode of operation, a definition of requirements and an evaluation of alternatives, with options then identified for action.

This report seeks to build on the Hemel 2020 Vision for the Two Waters area by carrying out a series of analytical studies contained in Sections 2 and 3, listening to views of key stakeholders and users contained in Section 4 before looking into options and recommendations contained in Section 5 onwards.

It is important to note that the design proposals recommended in the report are derived from the analysis, consultation and design process and are recommendations that could be taken forward in the future; they are not final options that Dacorum Borough Council or The Box Moor Trust are obliged to deliver. Proposals will require further technical appraisal through a detailed design stage, a financial appraisal to determine viability and cost effectiveness, and wider consideration by organisations and interested individuals.

The study aims to identify possible ‘quick win proposals’ which can be achieved relatively easily and economically, with longer term aspirations that will require a review against Borough planning policies.

1.5 Project Process

The project methodology outlines the stages for the development of a comprehensive feasibility study.

The objectives/tasks include:

- Audit of site context including landscape features, greenspaces, infrastructure, linkages and relationships with adjoining settlements (existing and planned);
- Set out the various visions and ideas for the enhancement of the project study area, including any additional parcels of land being investigated as part of the brief;
- Develop options for the site, setting out preliminary proposals for land use, massing, scale and form, and define a strategy for the landscape;
- Develop a Draft Feasibility Report which establishes a context for the development of a preferred option, defining site-wide design principles and a landscape strategy, including pedestrian and vehicular circulation, and considers development in context of a livability agenda including a strategy for play and civic amenities in order to provide holistic and healthy communities;
- Complete the Final Feasibility report defining Masterplanning principles and recommendations for landscape design proposals including improvements to access and circulation, habitat and ecology enhancements and sport and play provision, with options on phasing, costs and delivery streams.

Ornamental planting in Heath Park Gardens
2.0 Contextual Analysis

2.1 Site Context

The first stage of analysis has been undertaken at a strategic scale, taking into consideration the urban, environmental and infrastructural elements throughout Hemel Hempstead and its environs.

The site remains the single point of reference throughout this stage of analysis. Information has been gathered from a number of primary, secondary and tertiary sources, including site and area investigations, policy documents and research in local archives.

The strategic analysis establishes an extensive framework and understanding upon which a finer level of analysis, conceptual thinking and design evolution can be built.

Hemel Hempstead is located in Hertfordshire, within Dacorum Borough. Its nearest settlements are Luton to the north, Watford and London to the south, St Albans to the east and Berkhamsted to the west.

It has been recognised as a town since the 8th century although grew markedly when designated as a ‘new town’ after World War II. There is evidence of significant settlement since the Roman era.

Hemel Hempstead is within close proximity to transport routes and waterways of regional and national importance, most notably the M1 and M25 motorways and the Grand Union Canal.

It is surrounded by a number of settlements similar in size and stature, and operates as both a commuter town to London and as a medium sized town in isolation. It has a population of approximately 80,000-90,000 people.

Hemel Hempstead is twinned with Neu-Isenburg, Germany.
The project study area is located to the south of Hemel Hempstead’s urban core and is bordered by the Town Centre to the north, London Road to the south and the residential areas of Boxmoor and Apsley to the west and east respectively.

The area is bisected horizontally by the Grand Union Canal and is crossed by the rivers Bulbourne and Gade.

Hemel Hempstead Station is located west of the study area and is adjacent to the south of Station Moor, Apsley station is to the southeast of the study area.

A short walk north is Hemel Hempstead Town Centre. New retail and residential developments face the site across the Plough Roundabout, a six way intersection bordering the northern tip of the study area. This links to the town’s main thoroughfare and pedestrianised shopping centre.

The original urban park proposal identified an area east of Two Waters Road up to Durrants Hill Road, and immediately west of Two Waters Road, including Heath Park. The extended study area plan below shows the area considered in this feasibility study which has been included to provide a greater contextual understanding of the focus area.
2.2 Historic Context

Hemel Hempstead has a wide and varied history, including Roman settlement based around trade with its neighbouring town, Verulamium (St Albans). A Royal Charter by Henry VIII declared it a Market Town with its own Bailiff in 1539.

The monastery at Ashridge was dissolved by the same King. His daughter, Elizabeth I, presented part of the lands to her favourite, Robert Dudley, Earl of Leicester, in 1574. He sold the land and properties in Hemel Hempstead and they were eventually bought by a group of local inhabitants in 1581. This secret arrangement became public in 1594 and the Box Moor Trust was officially founded. The Trust remains the current owner of many of the green spaces in the project study area.

A further Royal Charter in 1898 designated Hemel Hempstead as a Municipal Borough, although later, as part of the post-war programme, it was made a ‘New Town’, to house some of the overspill from war-damaged London.

Geoffrey Jellicoe was commissioned to plan the New Town. His vision was coloured by the Modern Movement and incorporated natural landscapes for recreation and leisure pursuits. His view of Hemel Hempstead was ‘not a city in a garden, but a city in a park.’

A large lake formed the central feature of the plan for the Town Centre. Although the Water Gardens were completed in 1961 and are still present today, his plans for the town centre and its environs was only partially implemented, with the outer neighbourhoods receiving the largest share of his input.

However, there is considerable historic character within the project study area, largely based around the evolution of life and work on the waterways and in their immediate vicinity.

Major physical historic changes to the study area include construction of the Grand Junction (Grand Union) Canal across Box Moor in 1797 and the building and subsequent removal of the Hemel Hempstead to Harpenden Railway (Nickey Line).

Boxmoor Wharf was the primary goods supply point to Hemel Hempstead from London throughout the 19th century and continued to be used up to the 1980s. Coal, coke, timber, as well as whisky and port and eventually lime juice, were all unloaded at the wharf.

A prominent employment sector was established within the Town Centre when Kodak moved into a purpose-built sixteen-storey office tower in 1971. Sited on top of a three-storey podium, the building was part of a £4.4 million pound investment programme in Hemel Hempstead by Kodak and became the company’s head office, housing almost 700 employees.

The Kodak tower is currently undergoing refurbishment by ‘Dandara’ to be relaunched as ‘Image’, a residential development that aims to regenerate a very prominent gateway site to the south of the Town Centre. The existing tower has been retained and refurbished and five new blocks have been erected enclosing a new public square.

The Dandara scheme provides a contribution to the housing need within the Borough whilst complementing the Hemel 2020 Vision. The scheme comprises of 434 residential units plus 3 storey blocks facing out to Cotterills and two 7-9 storey blocks fronting Leighton Buzzard Road. The scheme also includes a public square with A1, A2 and A3 uses.

As part of the proposal, a new ‘gateway’ pedestrian bridge link has been built between the new Dandara public square and the area adjacent to Riverside’s retail buildings on the opposite side of Leighton Buzzard Road. Access to the bridge link when complete will be between the proposed public square and the area adjacent Riverside retail buildings.

Riverside has a strong design identity and sets the tone for the southern section of the Town Centre. Riverside is described as the ‘gateway’ into the Town Centre retail district and its scale, height and design reflect this. The southernmost block, which is the building closest to the project study area has a curved wing that follows part of the Plough Roundabout. This block has a perimeter layout, which although it is 9/10 storeys high, gives the impression it has turned its back to Heath Park Gardens and Two Waters Road. Combined with the Kodak tower refurbishment, the view that higher buildings are now a feature of this part of the Town Centre is reinforced.

The building heights of the Dandara and Riverside developments have considerable visual impact on Heath Park Gardens, the northernmost part of the project study area. Any future development in the area should not compete with the Kodak Tower as this is a significant local landmark.
Aerial photo from 1954 looking south down Two Waters Road towards the project study area from above the Town Centre.

Geoffrey Jellicoe’s vision for Hemel Hempstead, 1947

Cricket bat willow trees were grown on the Moor from 1840 and from 1972-1990, 2000 bats per week were turned out for export all over the world under the trade name Century Bats.

Watercress production beds in Two Waters

River Gade and Boxmoor Wharf 1929 (above) and today (right).
2.3 Site Ownership

The ownership of the project study area is largely divided between the Box Moor Trust and Dacorum Borough Council.

The Box Moor Trust lease areas of their land to various organisations to generate an income for their estate, the most significant of which is Boxmoor Wharf. Various areas are leased by Dacorum Borough Council from the Box Moor Trust including Heath Park Gardens and the War Memorial area. Dacorum Borough Council leases out a number of areas in its ownership to organisations including the Boxmoor and District Angling Society and the Apsley Paper Trail.

The Grand Union Canal and its immediate surrounds including the towpaths are in the ownership of British Waterways.

There are also a number of sites in the project study area in private ownership.
2.4 Existing Visual Character

1. Avenue of trees on Station Moor
2. River Gade at Heath Park Gardens
3. The old Two Waters Road
4. Playground off Durrants Hill Road
5. Horses relaxing by the River Bulbourne on Station Moor
6. Two Waters East
7. The council Nursery Site in the Apsley Triangle
8. Hemel Hempstead Town Cricket Club clubhouse and cricket pitch in Heath Park
9. Lock 64 on the Grand Union Canal, south of Heath Park
10. B&Q on Boxmoor Wharf and the River Gade
11. Fishing lake in the Apsley Triangle
2.5 A Brief History of the Box Moor Trust

A brief history of the Box Moor Trust is given below, as an introduction to one of the primary landowners in the project study area and a charitable and long-standing organisation.

The Box Moor Trust is unique. Its story began in 1581, when the foresighted householders of Hemel Hempstead and Bovingdon secretly bought their water meadows for grazing and fishing, for the benefit of their “heirs and assigns” forever.

On 26 April 1594 the purchase, originally made in the names of three local front men, (William Gladman, Richard Pope and John Rolfe), became public and the Trust was officially founded. The land itself was once part of the endowment of the monastery at Ashridge, near Berkhamsted. It passed to Elizabeth I who gave some of the estate to her favourite, Robert Dudley, in 1574. He sold it to the Earl of Bedford and Peter Graye, whose son Richard, in 1581, subsequently disposed of the property situated in Hemel Hempstead and nearby pastures of ‘Box Moor’, from which the later village took its name.

The original list of 67 Feoffes* is still in existence, together with the continuing conveyances over the following two hundred years. Hemel Hempstead grew in importance as a market town with its corn market and sales of straw plait.

The coming of the Grand Junction Canal in 1797 and, in effect, the compulsory purchase of part of Box Moor, gave rise to the need for a smaller governing body. An Act of Parliament was passed to better regulate the affairs of the Trust and to control encroachments of many kinds on the common land.

Twelve Trustees were chosen for life by the population to oversee the Moors and the grazing rights of all inhabitants. The lists of these early Feoffes and Trustees and the full history is detailed in the book ‘Royalty to Commoners – Four Hundred Years of the Box Moor Trust’ (by Joan and Roger Hands, The Box Moor Trust 2004).

Twelve Trustees are still elected by the inhabitants of Hemel Hempstead and Bovingdon to direct the affairs of the charity which now comprises 487 acres, of which 280 acres are registered common land. The Trust is almost entirely self-financing in an economic climate where increasingly less funding is available for conserving the environment.

Within the Box Moor Estate today are water meadows, woods, cricket pitches, a golf course, rugby field and fishing lakes. The Trust owns houses and commercial property that provide the required income. The rivers Bulbourne and Gade meander through the valley, the main line railway bisects the lower Moors, whilst the once hotly debated A41 bypass cuts through its higher Commons.

The Box Moor Estate has seen many important events, from the coming of the canal, the construction of the first public railway and its station, and the earliest mechanisation of paper-making at Two Waters and Frogmore Mills. The last highwayman to be hung at the scene of his crime, James Snook (‘Robber Snooks’), was dispatched on Box Moor in March 1802 and memorial stones mark the occasion, if not the exact site of the hanging.

Watercress and osier beds once played their part in the livelihood of the local people, whilst clay and gravel pits, lime kilns and brickmaking gave employment. The money from the Grand Junction Canal Company helped to purchase Boxmoor Wharf, an increasingly important asset over many years. Henry Balderson leased it from 1856: B&Q (the DIY chain) currently rent the site from the Trust.

The Area of Benefit has seen the results of donations from the Trust to the Bailiff, in support of the Town Hall, the Workhouse, the Fire Brigade, Boxmoor Hall, churches and schools for over two hundred years. Nowadays, the Grants Committee oversees grant applications from within the Area of Benefit for modest capital projects, after approval by the full Board of Trustees.

The history of the Box Moor Trust provides a valuable social record. It is not a static body, but has evolved continuously since 1594, although the Moors along the valleys of the rivers Gade and Bulbourne have remained more or less constant, in spite of the desire for quicker transport and increasing development of the New Town.

Roughdown and Sheethanger Commons were acquired in 1886, from the Dean and Chapter of St. Paul’s. This greatly increased the grazing and amenity land and four years later, Boxmoor Golf Club was formed, since the hilly Sheethanger Common made a challenging and scenic 9-hole golf course.

*Feoffes: Equivalent of a modern Trustee
**Original map credited to British Waterways
In more recent years, Westbrook Hay Estate was leased and then purchased, adding a more diverse habitat to the already ecologically rare sites within the Box Moor Estate. The Old Barn was carefully restored, gaining an award by the Chiltern Society, and now provides a useful education centre and shelter for ramblers. A timber boardwalk leads into the woodland and provides easier access for mobility vehicles and the less agile. There is a pond for water dipping and visiting school groups find a variety of species to whet their appetite.

The worked-out clay pits for the brickworks at Bovingdon were acquired in 2000 and a major environmental reinstatement programme has been implemented to provide yet more natural diversity within the Estate. Pixies Mere Fishery was bought in 2003, in order to provide opportunities for this time-honoured activity within the local area and further income to support the work of the Trust.

The worked-out clay pits for the brickworks at Bovingdon were acquired in 2000 and a major environmental reinstatement programme has been implemented to provide yet more natural diversity within the Estate. Pixies Mere Fishery was bought in 2003, in order to provide opportunities for this time-honoured activity within the local area and further income to support the work of the Trust.

The original aims of the Trust were for the inhabitants of Hemel Hempstead and Bovingdon to enjoy the ‘profits, commodities and benefits of the Meadows and Fishing for ever’. The grazing rights were formalised in 1833 when special metal plaques were fixed to the properties whose inhabitants held these rights. Tickets were issued on ‘Pasture Ticket Days’ annually in the Spring and are still issued today as both cattle and horses graze the historic Moors.

The Trust has its own herd of Belted Galloway cattle and a flock of rare Norfolk Horn sheep, which provide much pleasure to the urban dwellers of the New Town, besides helping to conserve rare breeds and maintaining the grassland.

The botanical records are a vital feature of the Estate and these have been expertly provided in recent years by Gerald Salisbury and Jill Saunders. John Leonhardt helped with the invertebrate and fish studies; the birdlife also has been well noted by various people over a long period.

The educational and community aspects of the Trust’s work have taken on a greater significance since the leasing of Boxmoor Wharf to B&Q gave the Trustees an increased source of regular income. The new Scheme authorised by Parliament in 2000 enabled the Trust to be more pro-active and now a full time Education and Community Manager, as well as the Estate and Office Managers overseen by the General Manager lead a team of paid employees, and the valuable efforts of the many volunteers.

The Friends of the Box Moor Trust was founded to enable wider participation by local people that the Trust serves. Newsletters, competitions and special events are part of the annual programme and the highly successful ‘Music on the Moor’ attracts huge crowds every two years. A ‘Conker Festival’ is held every autumn and other smaller scale activities take place throughout the busy year. Carter’s Steam Fair and humane circuses have become yearly features too, as the opportunities for ‘fresh air and exercise’, and an extension of leisure activities, are seen as vital nowadays. Yet, above all, the Box Moor Trust continues in its role of providing open green space, and a pleasing natural environment, on the edge of a highly urbanised area.

The Friends of the Box Moor Trust was founded to enable wider participation by local people that the Trust serves. Newsletters, competitions and special events are part of the annual programme and the highly successful ‘Music on the Moor’ attracts huge crowds every two years. A ‘Conker Festival’ is held every autumn and other smaller scale activities take place throughout the busy year. Carter’s Steam Fair and humane circuses have become yearly features too, as the opportunities for ‘fresh air and exercise’, and an extension of leisure activities, are seen as vital nowadays. Yet, above all, the Box Moor Trust continues in its role of providing open green space, and a pleasing natural environment, on the edge of a highly urbanised area.

The Friends of the Box Moor Trust was founded to enable wider participation by local people that the Trust serves. Newsletters, competitions and special events are part of the annual programme and the highly successful ‘Music on the Moor’ attracts huge crowds every two years. A ‘Conker Festival’ is held every autumn and other smaller scale activities take place throughout the busy year. Carter’s Steam Fair and humane circuses have become yearly features too, as the opportunities for ‘fresh air and exercise’, and an extension of leisure activities, are seen as vital nowadays. Yet, above all, the Box Moor Trust continues in its role of providing open green space, and a pleasing natural environment, on the edge of a highly urbanised area.

The Friends of the Box Moor Trust was founded to enable wider participation by local people that the Trust serves. Newsletters, competitions and special events are part of the annual programme and the highly successful ‘Music on the Moor’ attracts huge crowds every two years. A ‘Conker Festival’ is held every autumn and other smaller scale activities take place throughout the busy year. Carter’s Steam Fair and humane circuses have become yearly features too, as the opportunities for ‘fresh air and exercise’, and an extension of leisure activities, are seen as vital nowadays. Yet, above all, the Box Moor Trust continues in its role of providing open green space, and a pleasing natural environment, on the edge of a highly urbanised area.
2.6 Open Space Study

The Open Space Study (Dacorum Borough Council, 2008), provides information on the open space needs in the Borough, and the current level of provision for each of the typologies within Planning Policy Guidance (PPG) Note 17- Planning for Open Space Sport and Recreation.

The typologies of greenspace described in PPG 17 are:
- Parks and Gardens
- Natural and Semi-Natural Greenspaces
- Green Corridors
- Outdoor Sports Facilities
- Amenity Greenspace
- Provision for Children
- Allotments
- Cemeteries and Churchyards

Hemel Hempstead has a variety of open spaces with a total area of over 591.267 hectares. This equates to 7.204 hectares per 1000 population. The town is currently deficient of only 6.02 hectares of open space in total when compared to the 2.8 hectares per thousand people set out in the Local Plan.

Currently there are no open spaces that are big enough to be considered as a Regional Park (defined by Dacorum Borough Council as being over 60 hectares) within Hemel Hempstead. Gadebridge Park, Bunkers Park, Sheebhanger Common/ Bury Wood and Boxmoor are of sufficient size (over 20 hectares) to be considered as Borough Parks. (These are parks with a borough wide catchment rather than necessarily the property of Dacorum Borough Council). There are also 32 local parks in Hemel Hempstead.

Provision for Allotments and Areas for Children are identified as being below those required in the Local Plan.
2.7 Green Network

Hemel Hempstead has a significant quantity of both designed and natural open spaces, a reasonable sports provision and relatively easy access to the rural fringe from many areas.

There are a significant number of local parks as well as a small number of borough and destination parks, that attract people from within the Town.

Hemel Hempstead has a large provision of amenity and natural green spaces. Amenity greens are one of the key features of the original ‘New Town Neighbourhood’ philosophy that much of modern Hemel Hempstead is based upon.

This diagram both highlights the significant proportion of the town that is comprised of greenspaces when compared to the urban fabric, and also how centrally located the project study area is in comparison to these others.

A detailed and comprehensive survey of the natural aspects of the area can be found in the Dacorum Borough Council Urban Nature Conservation Study 2006.
2.8 Public Transport and Vehicular Movement

Transport provision in Hemel Hempstead is generally good. The town has access to a number of significant roads of national importance including the M1 and M25 motorways.

Hemel Hempstead Station provides a direct route south to London through Watford, and north to Milton Keynes via Tring. Apsley Station operates on the same line although less trains per hour stop there due to its local status. Both stations are operated by London Midland.

Local and national buses operate from the station to the north of the Town Centre and travel along all major roads surrounding the study area. These are operated by several independent commercial companies.

There are a number of signed and unsigned cycleways in Hemel Hempstead. The provision is generally quite low however there is the ambition for an inter-urban cycle route. The Grand Union Canal’s towpath and disused Nickey railway line provide long distance cycle routes in the area although they are unsigned and unmade.

The focus of this study is the area concentrated around Two Waters Road but further environmental considerations should be given to the approach into Hemel Hempstead from the A41 along Two Waters Road. This piece of highway plays an important role of first impressions into Hemel Hempstead but leads into a very congested junction at London Road and Two Waters. The building uses around the junction could be enhanced and the highway environs could benefit from further soft landscaping along its edges to promote the countryside character.
3.0 Local Analysis

This second, more detailed, stage of analysis has been undertaken at a local scale, taking into consideration the human, environmental and infrastructural elements of the project study area.

The site remains the single point of reference throughout this stage. Information has been gathered from a number of primary, secondary and tertiary sources, including a number of site and area investigations, policy documents and research in local archives.

The local analysis will establish a framework and understanding from which design options will evolve.

1. Maintaining the Environmental Integrity and Open Character of the Bulbourne and Gade Valleys and in particular the setting of the Grand Union Canal.
   - The Local Plan states: ‘Open Land in the valley bottoms should generally be kept free from built development, otherwise two key objectives would be prejudiced (ie maintaining the openness of the valleys and enhancing the open environment of the main route into the town centre).’
   - An Open Land Strategy Diagram explains how open land in Two Waters and Apsley fits into the urban form of the town. There are three key elements:
     - The substantial green wedge of countryside penetrating Boxmoor and Two Waters designated as Open Land (covered by Policies 9 and 116);
     - The Grand Union Canal (covered by Policy TWA1); and
     - The rivers (covered by Policy TWA2)

2. Enhancing the Immediate Environment of Two Waters Way to create an Attractive Route into the Town and Town Centre.
   - Two Waters Way runs from its grade separated junction with the A41 to the bridge over the Grand Union Canal where it rejoins the original Two Waters Road. The town entry route then runs along Two Waters Road between attractive open space on the west and Corner Hall General Employment Area on the east to the Town Centre.
   - New building will be permitted alongside the route in Corner Hall and Two Waters General Employment Areas (ref. Policy 31), provided it is part of a co-ordinated design scheme. The design of buildings, including their roof lines and the boundaries of their sites are expected to be of a high quality. Building heights must not exceed those given in Policy 31.
   - Under Policy TWA3, Control of Development alongside Two Waters Way and Two Waters Road, the open areas adjoining the route, no building or other development will be permitted, if it intrudes upon the openness of the countryside skyline or the swathe of green space (west of the road) which leads to the Grand Union Canal.
   - New roads should not simply be built to deal with congestion (although local environmental conditions and the accommodation of new development may necessitate appropriate provision).

3. Limiting the Environmental Impact of Road Building and Traffic
   - Overall road traffic demand should be controlled because meeting forecasts of high traffic growth would cause environmental problems and not necessarily prevent congestion:
     - New roads should not simply be built to deal with congestion (although local environmental conditions and the accommodation of new development may necessitate appropriate provision).

4. Realising Opportunities for Development which will benefit the Town
   - The identification of opportunities for new development at Two Waters and Apsley was guided by the following principles:
     - To retain a satisfactory level of employment;
     - To maintain a base of industrial activity and storage uses;
     - To develop the potential attraction of the industrial and canal heritage;
     - To provide more housing;
     - To create conditions in which the Apsley local centre can flourish; and
     - To restrict growth of out-of centre retailing.

5. Ensuring the Future Pattern of Development is properly related to the Highway Network
   - A co-ordinated set of road proposals is intended to maintain highway capacity through Apsley and serve new schemes. Indicative cycling and footpath networks should enable good access to be achieved through the area.

The Core Strategy
   - The Local Plan (1991-2011) is currently being reviewed and will gradually be replaced, the first and most important step to this replacement is the Core Strategy. The Core Strategy addresses housing, economic and environmental matters in the Borough. It is currently at the consultation stage. The Council will formally publish the Core Strategy in summer 2011.
An extract of the Local Plan showing the Two Waters study area
3.2 Planning Policy Review: Open Space Assessment

The study area is situated in the southern sector of Hemel Hempstead. To the west is the residential area of Boxmoor, which started as a Victorian development linked to the presence of the railway. Similarly to the east, Apsley was a mill town of primarily Victorian development, however with a history dating to the Medieval era.

Hemel Hempstead’s ‘New Town’ neighbourhoods were constructed with a high proportion of greenspace closely integrated within the housing. By comparison Apsley and the older parts of Boxmoor area are deficient in amenity open space. However, both benefit from a large strategic greenspace, due to the presence of the Moors and waterways. Apsley and Nash Mills are highlighted in the Open Space Study (Dacorum Borough Council, 2008) as being deficient of local park provision at the 280 metre recommended catchment level.

As part of the development of the Green Space Strategy (Dacorum Borough Council, 2010), a quality assessment of significant publicly accessible green spaces was undertaken, based on the criteria for the Green Flag Award®. This included greenspaces from within the study area, which are collected in the table opposite on page 21.

A number of actions were identified through the Green Space Strategy which are relevant to this study and should be considered during the design process. A significant action was the recommendation to develop a refurbishment plan for Heath Park Gardens to improve its features, use and biodiversity. In the Open Space Assessment opposite, this area scores poorly, mainly due to an overall impression of neglect in the hard landscaping and street furniture. The lack of enforcement over ad hoc car parking at Comer Hall also creates issues visually and physically, although this is currently under review, as described in Section 3.5. The subway link underneath the Plough Roundabout is not an inviting prospect and could benefit from a wider entrance point tied into any design proposals for Heath Park Gardens. The space does, however, have opportunities, such as embracing the River Gade to the wider park environs and its prominent location. It also has a strong relationship with Hemel Hempstead Town Cricket Club yet there is potential for its location near to the Town Centre and the Dandara re-development to be strengthened to create a more appealing destination and a welcoming entrance to the Two Waters area.

Other relevant actions identified include identifying re-development opportunities for poor quality land within the study area to improve the range and quality of facilities available.

Further improvements to local play and recreation for the younger generation could be targeted at Durrants Hill and Lawn Lane, both small open spaces with access to the local watercourses and woodland. Access to these spaces could be improved, as well as providing more equipment and facilities to make these spaces appealing destinations.
<table>
<thead>
<tr>
<th>Open Space Assessment</th>
<th>Size (ha)</th>
<th>Description</th>
<th>Judging Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boxmoor inc: Park, Two Waters &amp; Apsley Triangle</td>
<td>19.8ha</td>
<td>A combination of sports fields and meadows which straddle the river and canal adjacent to the A414. The generally open aspect allows good visibility onto the site and easy orientation by users. The entrances are fairly low key but numerous. The path network is variable in quality and may become difficult in wet weather.</td>
<td><em>The Green Flag Award® scheme is the benchmark national standard for parks and green spaces in England and Wales. Judging criteria include: 1. A welcoming place, 2. Healthy, safe and secure, 3. Clean and well maintained, 4. Sustainability, 5. Conservation and heritage, 6. Community involvement, 7. Marketing and 8. Management.</em></td>
<td>Fair</td>
</tr>
<tr>
<td>Heath Park Gardens</td>
<td>1.4ha</td>
<td>A small formal park adjacent to the Town Centre containing bedding displays and a rose garden. The generally open aspect is an advantage and the retention of annual bedding and mixed perennial displays adds interest and visual appeal to the site. The virtual absence of benches combined with numerous empty bench plinths and localised deterioration in the hard surfaces creates a poor impression. The poor quality of the rose garden also detracts from the potentially welcoming appeal of this site and gives a general impression of neglect. The dark and heavily graffitied subway which forms the main access from the Town Centre will deter usage. The current parking arrangements on the grass verge at the southern boundary of the park also give a very poor impression due to the excessive mud generated and ad hoc nature of the parking.</td>
<td></td>
<td>Poor</td>
</tr>
<tr>
<td>Durrants Hill</td>
<td>0.3ha</td>
<td>A small open space with play area between Grand Union Canal and River Gade. Access from Durrants Hill Road is difficult, and the condition of the access road detracts from the space. More play equipment and new fencing, benches, and bins would make the site more appealing and usable.</td>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td>Lawn Lane</td>
<td>0.36ha</td>
<td>An informal recreation space with wooded area next to Grand Union Canal. A quiet green space with nature conservation potential. Access is difficult from Durrants Hill Road; improving this with new bins and benches would widen the areas appeal. A woodland management plan is required.</td>
<td></td>
<td>Poor</td>
</tr>
<tr>
<td>Boxmoor (Part)</td>
<td>17.4ha</td>
<td>A complex of green spaces covering most of the valley floor. The area maintains a traditional character containing substantial meadows, avenues of trees and two cricket grounds. The River Bulbourne and Grand Union Canal pass through the area adding considerable aesthetic, recreational and conservation interest. The generally open aspect allows good visibility onto the site and easy orientation by users. The entrances are fairly low key but numerous. The path network is variable in quality and may become difficult in wet weather. The level of signage is quite variable, with some areas better signed than others. One interpretation board was present but covered a very wide area beyond the park restricting the amount of site specific info. Kissing gates of various dimensions, some steps and wet ground in poor weather would restrict access to only admit those who have come equipped and are reasonably able. However, some surfaced paths are present and degrees of accessibility will always be a fact on a site of this character. The extensive use of grazing to retain the character and diversity of this landscape is commendable.</td>
<td></td>
<td>Fair</td>
</tr>
</tbody>
</table>
3.3 Land Use and Character

This plan shows the current management, usage and character of land within the project study area. There is considerable diversity in use from open grazing land to amenity parkland to warehousing and retail sites.

A number of seasonal events occur within the area including Music on the Moor, the Box Moor Trust Conker Festival and an annual steam fair, as well as numerous cricket matches, and regular angling on the waterways.

The quality of the built environment and character of the land adjoining Two Waters Road helps establish the impression people have on entering the Town Centre and is important to its overall setting. The swathe of open moorland to the west of Two Waters Road presents the most visually attractive, unified and unique green entrance to any Town Centre and should be retained.

The area to the east of Two Waters Road and south of the Grand Union Canal, has similar qualities to the open grazed moors and parkland to the west; it contains mature woodland and a watercress bed lake. North of the Grand Union Canal and to the east of Two Waters Road is more built up with a variety of commercial, residential and industrial uses. The Local Plan states that new building will be permitted alongside Lawn Lane in Corner Hall and Two Waters Road provided the openness of the countryside skyline or the open space swathe of the Moors is kept intact. Therefore any development proposals must ensure they are part of a co-ordinated design scheme which should also promote many of the qualities associated with a planned New Town - the open areas, the links with the countryside and high quality building design.

The key characteristics of the study area’s surrounding landscape include:

- A narrow valley floor dominated by transport routes including the London to Glasgow west coast mainline railway, the Grand Union Canal and the A41.
- Steep sloping valley sides with views to major settlements and landmark buildings such as the former Kodak Building.
- Large arable fields with few hedgerows on the valley slopes.
- Railway embankments, bridges and gantries.

The study area itself also possesses distinctive landscape features including, but not limited to:

- Grazing animals on the Box Moor Trust land.
- Activities associated with the Grand Union Canal such as basins, locks, narrowboats and bridges.
- Water meadows and remaining pollarded willows associated with the River Bulbourne.
- Secondary roads running up the valley slopes in sunken lanes with hedgebanks.
- Disused watercress beds at Old Fishery Lane.
- Ancient, semi-natural woodland, planted avenues of common lime and planted horse chestnuts.
3.4 Site Utilities and Contamination

Various utilities lie beneath the project study area, although primarily conform to existing roads.

There are a number of small electricity substations to the east of the site, and one identified area of potentially contaminated land.

The former Hewden Plant Hire site, just north of Two Water East, has been subject to remediation and monitoring works between 2006 and 2008 to address hydrocarbon contamination issues. During its previous use as a plant hire business, the soil and groundwater of this site had become contaminated by diesel and other petroleum hydrocarbons. The site is situated above a major chalk aquifer, is in a groundwater protection zone, and is adjacent to the River Bulbourne. The main driver for the remediation was to prevent pollution of the underlying groundwater and the Bulbourne.

The clean up levels used for soil on the Hewden Plant site were based on the area remaining as a commercial/industrial land use. If the site was to be redeveloped to a more sensitive end use (e.g. park or public open space) it is possible that further remediation of the soil might be required to meet the more stringent clean up levels used for non-commercial/industrial land uses. However, Dacorum Borough Council has confirmed if the potential contamination was to remain beneath hard standing and/or buildings, there is unlikely to be an issue as any contamination would be sealed beneath the ground.

Subject to a future use being identified for the Hewden Plant site, all of the above should be taken into consideration and tested further.

There is a concrete water gauging station on the River Bulbourne at Two Waters Road (EA). There is the potential to soften this and it is feasible to remove some or all of the channel, however it must be noted that there is a requirement for water gauging in this location.
3.5 Vehicular and Cycle Movement

The study area is bisected by Two Waters Road providing vehicular access to the Town Centre, and the southern gateway into Hemel Hempstead. It is well used, and as a result, reasonably fast moving. London Road borders the southern edge of the study area and is of a similar size and usage. Stallon Road crosses the site and provides access from the Town Centre to Hemel Hempstead Railway Station.

There are three official car parking locations in the project study area; these are a small area of free parking spaces bordering Blackbird’s Moor, the pay and display car park off Durrants Hill Rd and the car park at Hemel Hempstead Station. A number of unofficial, car parking areas are in use on some minor roads where people often park to visit the Town Centre or Hemel Hempstead Railway Station. They are haphazard in their use and detrimental to the visual quality of the space.

A number of cycle routes are in use through the area. The towpath along the canal is signed and reasonably well used but unpaved, and Lawn Lane is signed but has no specific cycle lane. The quality of the surfacing and signage could be enhanced, and management of the vegetation running along the cycle routes should be reviewed to ensure routes are kept as clear as possible to aid visibility and safety.

The ad hoc parking arrangement that currently exists at Corner Hall Lane by Hemel Hempstead Town Cricket Club will be prevented as part of the Dandara development’s Section 106 funded proposals which will restrict vehicles accessing this space from either Station Road or Two Waters Road. Recommendations for Heath Park Gardens should consider this route remaining as a key pedestrian link from Corner Hall, across Two Waters Road, and onto Station Road.

1. Railway Station Car Park and Station Moor
2. Haphazard Parking at Corner Hall (recently improved by the introduction of temporary bollards by the Box Moor Trust)
3. The Plough Roundabout
4. Two Waters Road
The Plough Roundabout (colloquially known as the 'Magic Roundabout') opened in 1973, is in fact 6 mini roundabouts with traffic moving in two directions around a central island. It forms the northern-most boundary of the project study area.

The roundabout severely restricts pedestrian access between Heath Park Gardens and the Town Centre, as the primary method of access is a low quality subway (shown dashed on the roundabout diagram - right) as the direct method for pedestrians to navigate the roundabout. Street level crossings are available at Station Road and Lawn Lane, but this adds considerable effort to reach Riverside and the Town Centre. As a consequence, this reduces the usage of Heath Park.

A pedestrian footbridge has been installed between the northwest edge of Plough Roundabout and the new Dandara housing development (bridge shown far right in red). This does not necessarily improve pedestrian access to Heath Park and the Moors as the bridge directs the pedestrian to the centre of the residential scheme, therefore once this has been navigated, a further crossing of Station Road is required at an existing pedestrian crossing.

Adjustments to the roundabout to allow more pedestrian crossings at street level would require a detailed analysis of its operation, and the effect it may have on the wider street network. This is not within the scope of this study.

A number of options could be explored to improve accessibility across the Plough Roundabout, although ensuring the River Gade is not affected by any proposed improvements is a significant consideration:

- Create more visible and legible entrances, particularly at Heath Park Gardens so more natural light and views can penetrate to the underpass level;
- Ensure any entrance adjustments are co-ordinated with wider public realm improvements to Heath Park Gardens itself;
- Make improvements to the internal structure of the underpass, ranging from enhanced lighting, surfacing, arts and wayfinding to make it a pleasant journey, rather than a forced and daunting experience.
3.6 Pedestrian Access

Access to the south and west of the project study area is restricted through fencing and a limited number of kissing gates.

The residential areas to the east of the project study area have very limited pedestrian access to the wider greenspace of the park and moors, although the isolated Lawn Lane Open Space dog walking area is within easy reach.

The areas to the north and northwest have unrestricted access to Blackbirds Moor and Heath Park. This area is more widely used as an amenity space and community resource.

Pedestrian access from the Town Centre to the site is severely restricted by the Plough Roundabout and is generally impeded by the site’s fast moving A-road borders.
3.7 Pedestrian Movement

Current pedestrian usage through the project study area is largely dominated by informal recreational use, often through dog-walking and visiting the greenspace. A significant pedestrian route across Station Moor is currently in operation however its informal nature and bark mulch surfacing limits its use to those without mobility impairment, and use in dry conditions.

This Station to Town Centre walking commute is largely under used, although it is recognised that there is a public preference to walk across the moors should it be considered practicable. At present, train passengers often prefer taxis and private car drop off, due to the unwelcoming nature of the pedestrian footways across the moors, as they are unlit, unsigned and unmade.

A number of Railway Station to Town Centre routes have been shown here. The longest of these routes avoids roads entirely and is 1810 metres long. The most direct route crossing Station Moor is 1307 metres long or approximately 15 minutes walk.

There are a small number of Public Rights of Way in the project study area, and a number of mapped yet informal paths exist through the common land.

The core of the project study area at Two Waters Road is within 5 minutes walk of the Town Centre and 10 minutes walk of Hemel Hempstead Railway Station.
3.8 Rivers and Watercourses

The project study area lies at the confluence of Hemel Hempstead’s three primary waterways, the chalk streams Gade and Bulbourne, and the Grand Union Canal.

The waterways flow north to south and west to east respectively. There are also a number of lakes used by private fishing clubs with no public access.

The Gade and Bulbourne rivers join at Two Waters (becoming the River Gade). The Grand Union Canal continues along the open land corridor through the Gade valley.

The Rivers Gade and Bulbourne, their banks and environs are not only major assets to the Town Centre, but they also contribute to the wider environmental strategy of maintaining the river valleys through Hemel Hempstead as open land. Their clear, mineral rich water and lack of silt bear many of the classic characteristics of chalk streams.

The Local Plan, under policy TWA2 addresses the importance of the River Gade and River Bulbourne and their margins as an ecological and environmental resource, with proposals expected to:

- Retain and supplement existing planting, including the water margins;
- Reinstate banks to their natural state by removal of walls;
- Maintain landscaping buffers along the banks; and
- Support initiatives to improve the flow and quality of water.

Recent developments to the south of the Town Centre have treated the Gade positively through river enhancements introduced as part of the Riverside retail development. Future opportunities could extend improvements into the Water Gardens.

The Grand Union Canal provides an uninterrupted water and towpath route through the Bulbourne and Gade valleys, from the green wedge at Boxmoor and Two Waters, to the Green Belt at Nash Mills.
3.9 Flood Risk

The flood risk area is relatively wide and covers much of Bulbourne and Hardings Moors as well as areas of Boxmoor Wharf.

Dacorum Borough Council commissioned Halcrow Group Ltd to produce a Level 2 Strategic Flood Risk Assessment for Hemel Hempstead and Berkhamsted. The final report was issued June 2008. The report primarily looks at the River Gade in Hemel Hempstead and breach modelling of the Grand Union Canal in Berkhamsted. The council’s Local Plan document identified a number of Development Areas, with Two Waters Road, south of the Plough Roundabout being the only area that overlaps with this study. The results of the modelling data for this area is shown below.

The results illustrate that a significant part of the site will flood in a 1 in 20 year event, which in accordance with PPS25 classifies the site as Flood Zone 3b. The remainder of the site will flood in a 1 in 100 year event and as such is classified as Flood Zone 3a. In short, the site at the top of Two Waters Road between the Plough Roundabout and Corner Hall sits in a zone of High Probability of flooding where land may be required to store water in times of flood. It is reasonable to assume that any development across this study area will require a site specific Flood Risk Assessment to be prepared in accordance with PPS25.
3.10 Wildlife and Ecology

The Moors are a vital asset to Hemel Hempstead, not only for recreation, but also for their ecological value. The Box Moor Trust estate covers 204.26 hectares of land in Hemel Hempstead and surrounding area, much of it with open public access. It lies in the Chilterns Natural Area, a biogeographic zone which contains distinctive elements of flora and fauna and provides a framework for setting nature conservation objectives.

The nature conservation resources featured as important in this area include chalk grassland, Chilterns commons, the river valleys and chalk streams, all of which are represented in Box Moor Trust owned land.

In this study area, the focus is on the ‘eastern moors’ of the Trust’s holdings. They are generally flat and parts are waterlogged in places. A back river takes water from the Bulbourne and is an attractive feature with natural banks and gentle meanders. Apart from the river margins and isolated localities, these valley floor fields could be considered to have generally low botanical quality but high amenity value.

A summary of the moors is described here.

**Apsley Triangle**
Comprised mainly of amenity grassland with some scattered trees. There is a short avenue of lime trees and numerous white willows by the river. The lake provides a significant ecological resource and the area is rich in biodiverse water and land habitats.

**Two Waters**
Made up of mown amenity grassland with few common herb species only.

**Boxmoor Wharf**
Occupied by retail warehouses, this site has little or no ecological value.

**Heath Park Gardens**
Made up of formal tree planting and close mown grass that forms the bulk of the area with some introduced shrubs and rose beds. Tree species include norway maple, whitebeams, horse chestnut and lime. The River Gade in this area has a hard edge, despite this a number of marginal species are present and the clarity of the water in the chalk stream is good.

**Balderson’s Moor**
Made up of parkland and scattered trees. There is a row of horse chestnut and lime trees along the channel. The close mown cricket pitch is species-poor.

**Heath Park**
Along the southern edge of the Hemel Hempstead Town Cricket Club near the canal there is a line of lombardy poplars. Other significant specimen and groups of trees are composed of ash, crack willow, sycamore, lime, horse chestnut, and mature elms. Ivy covers the ground under these trees. Bordering the canal there is a dense fringe of tall reed vegetation.

**Blackbird’s Moor**
The character is generally parkland and scattered trees. Rows of horse chestnut trees along a path and along the northern road boundary dominate this area. Lime and sycamore trees occur around the buildings, ash and copper beech surround the cricket pitch and pedunculate oak, walnut, alder and weeping willow are planted near the canal. The close mown cricket pitch itself is species poor.

**Station Moor**
This grazed grassland has horse chestnuts in avenues and groups which dominate this area showing a clear boundary line. A few ash trees occur near the canal and elsewhere there are occasional sycamore trees.

**Harding’s Moor**
This moor has a woodland feel in areas, with a variety of broadleaf trees planted amongst existing trees and scrub. There is norway maple, pedunculate oaks, field maple, beech, walnut, sycamore, silver birch and two very large white willows. The moor has a line of lime trees either side of a path running diagonally through the pasture. Horse chestnuts occur along the southern road boundary. Seepage from the canal has produced marshy grassland with some marginal vegetation by the river.

**Bulbourne Moor**
This area was formerly allotments. It is species poor grazed grassland with scattered hawthorn scrub hedging that follows the old Nickey Line railway. It contains white willow trees, holly and elder.
3.11 Box Moor Trust Management Plan

The Box Moor Trust has a draft management plan for a number of areas within their ownership. The plan has been developed and is owned by the Box Moor Trust. The plan is drawn up from both historical land use and discussion between members of the public (through the research of the Strategic Review), Trustees and Staff. The plan has been distilled graphically here by BDP.

There are no significant changes proposed to the current management regime, usage or leasing to any area, although the Box Moor Trust is currently looking at some minor improvements such as fencing and planting. These are shown in red.

It should be noted that in general Dacorum Borough Council does not routinely apply Tree Protection Orders to trees on Trust land due to their land management and conservation principles.
4.0 Consultation

4.1 Consultation Approach

In order to build upon the brief and the aspirations set out by the client team, a series of consultations and meetings have taken place involving members of the public, various departments within Dacorum Borough Council and key stakeholders. This is in keeping with Dacorum Borough Council’s philosophy of involving the community in decisions that will ultimately affect their lives.

A public consultation event took place in the pedestrianised Marlowes Town Centre shopping area on Thursday 24th June 2010 in order to coincide with a busy market day and the opportunity to speak to as wide an audience as possible. Alternative communication methods were also used, including a paper questionnaire for those unable to give their views on the day, and an online questionnaire on the Dacorum Borough Council website, advertised through a press release.

These have been utilised to involve as wide and as diverse an audience as possible in the process. A summary of the approach to engaging with stakeholders and the local community is provided on the following pages with a full report of the feedback received in Appendix 1.

This consultation served three main purposes:

- To improve awareness of the study, its location, size, general aspirations and timescale.
- To establish what people would like to see—how would they like to use the space? What are the desires? How could the area be improved?
- To build upon local knowledge and history, and to incorporate the expertise and guidance of various stakeholders.

4.2 Summary of Responses Received

The public consultation event yielded a response from 70 people on the day and the subsequent online invitation received 160 responses. The online questionnaire included seventeen suggestions for how the Two Waters area could be improved and respondents were invited to tick those that they felt were appropriate. The results of which are shown below. The questionnaire also allowed further opinions and views to be added, which have been assessed with the responses gained from the consultation event, compiled in Appendix 1.

- 71.7% River and other habitat improvements
- 63.8% Grazing and cattle
- 58.6% Signs (for example, historical information boards, suggested walks, wildlife information)
- 55.3% Improved footpaths
- 48.0% Improved cycle path
- 35.5% Picnic facilities
- 35.5% Orchards
- 31.6% Allotments / Community gardens
- 27.0% Visitor Centre (for conservation, heritage and/or nature information)
- 25.0% Children’s play facilities
- 24.3% Outdoor events and performance space
- 21.7% Mooring provision for recreational boating
- 19.7% Green energy creation
- 14.5% Town farm (educational / leisure facility)
- 11.8% Places to eat and drink
- 2.6% New housing

It is important to note that the percentages provide a useful impression of what the Two Waters study area should encompass. The majority of the responses feel very strongly that the Moors are a significant asset to the town and as such, retaining and protecting their heritage and the habitats would continue to enhance the area. Opportunities to improve wayfinding and access for pedestrian and cyclists were also positively received. Suggestions for more built orientated ideas such as sporting facilities, kiosks or restaurants and residential opportunities were perceived to offer less value to this part of the town.
Given the moors are a distinctive piece of countryside close to the Town Centre, a large proportion of the feedback received focuses on this. A significant number of responses echo the sentiment that they should be left as they are, but offer limited suggestions on the remainder of the Two Waters study area such as the Apsley Triangle or Corner Hall. However, a number of repeating comments were received, which are summarised as follows under seven key topics:

The Project
- The description of the scheme as an ‘Urban Park’ as set out in the Hemel 2020 Vision conveys the wrong intentions for Two Waters and has led to a false impression that the moors will become over designed and developed.
- The projects aims however look very good overall, the view was that an improved green space at the entry to the town would greatly enhance Hemel Hempstead.
- Any physical outcome of the project should address management and maintenance. Litter and rubbish scattered on the moors is an ongoing issue. Litter bins or collection regimes should be improved.

The Moors
- The moors should be left as they are – a natural open space, where you can walk, mingle with wildlife, picnic in the grass, play games, observe nature and watch events.
- The project should complement what is already there.
- Much of the area of the study is unique in being wild meadow and pasture that is accessible to the public. No change must be made to the use or designation of these areas.
- The moors are different from a town park, they offer an agricultural feel which is one of the special and unique features of Boxmoor, and therefore they should be protected.

Access and Circulation
- A review of footpath and cycle routes, with appropriately designed ‘access for all’ gates is welcomed.
- Re-surfacing the canal towpath is desired as it is seen as an important cycle and walking route, but overly formalising further paths through Box Moor Trust land should be avoided.
- Pedestrian access from Riverside to Heath Park Gardens should be improved and between the Town Centre to the rail station. The Plough Roundabout is perceived as a barrier to people circulating from the Town Centre to the green areas. Wayfinding in the town would be an improvement and enticing people to make the trip.
- Some areas of the moors should not be publically accessible to maintain wildlife protection zones.
- Improved accessibility to the moors for families and those with impaired mobility is encouraged.
- Additional pedestrian/cycle bridges over the canal and other waterways to improve access in the north/south direction should be looked at.
- Visitor car parking should be limited to disabled spaces at certain locations; the focus should be on better footpath and cycle routes as the area is well serviced by buses and close to the Town Centre. Many of the problems caused by ad hoc car parking are due to people trying to avoid parking in town, which is viewed as too expensive.

The Rivers and Canal
- A ‘mooring basin’ should only be considered as part of any future re-development of the B&Q site.
- There should be no loss of green at the expense of any mooring basin.
- A facility to moor boats is not required as this is catered for close by at Apsley Mills.

Sport and Play
- The area is not suitable for further formal sports provision with its associated development and related infrastructure.
- Outdoor gyms/fitness trails should be located sensitively and be made from materials that respond to the character of Two Waters. Opportunities for running routes and the ability to hire bikes on site to explore the area would be welcomed.
- The study area has a lot of maintained space taken up for cricket, and there is no local deficiency for sports, so the area does not require any further sporting facilities.
- Sport that requires fencing and hard surfacing is not seen to be fit in with the natural surroundings, therefore should not be encouraged.
- Improving play provision rather than extending it is required. Other parks within the environs of the Town Centre have good enough facilities; this space should not duplicate those.
- The moors offer enough informal play opportunities already

The potential for change
- Health Park could become a more productive landscape and recreational space. At present this area feels under used and under valued.
- No development, such as buildings of any kind should be developed on the moors.
- Opportunities to learn about food growing, livestock rearing and to develop a real connection with the countryside was seen as a potential positive use for the Central Nursery site and/or the derelict area at Two Waters Road.
- The combination of facilities should be explored such as a ‘town farm’ and ‘nature interpretation centre’ with proposals seeking to generate its own energy from biomass and water power.
- The Apsley triangle area is viewed as neglected and only used as a thoroughfare. The old plant hire depot could be redeveloped.
- If buildings are suggested, they should be in keeping with the environment, eco friendly and linked to the community.
- There should be no competition or duplication of local facilities, for example, moorings already at Apsley, green energy and education carried out at Kings Langley and various cafes/restaurants which already exist within the Town Centre.
- Housing near this scheme was particularly unfavourable, though comments suggest this applies mainly to Box Moor Trust land.
- Allotments could be a positive use of space as the site historically had some by Two Waters Road. However they should be in an area that can provide adequate parking and security.
- There is no need for a city farm- the moors have a variety of wildlife, including horses and livestock.
- Places to eat and drink should be placed nearer the town where there is greater footfall, natural surveillance, plus adequate refuse and parking facilities.

Signage and other Infrastructure
- Wayfinding and signage is generally welcomed, however branding and quantity of signs should be limited so the landscape is not compromised.
- Increasing the opportunity for people to gain a better understanding of their local biodiversity is viewed as a positive.
- Public Toilets facilities would be welcomed.
- No permanent performance area is required; this may end up being redundant for long periods of time- the grazing land is adequate for events to take place, such as Music on the Moor.

People feel very lucky to have such a space as the Moors on their doorstep, and are rightfully protective of it. The grazing of livestock so close to a Town Centre is fairly unique and provides a strong connection to Hemel Hempstead’s rural past. Adding any structures to what is generally a well maintained natural space is not favoured, though small scale improvements to habitat enhancement and access to open spaces are seen as a positive improvement. The responses suggest that people are receptive to larger scale changes but this should only take place on existing built or brownfield land and any buildings proposed should be in keeping with the local character, eco friendly and be linked to community use.
5.0 Developing the Design Approach

Taking the analysis stage forward, a design approach has been developed in order to distil the applicable constraints and opportunities to take forward to outline design. At this point the report will initially discuss the concept development of the project study area as a whole, and as a result of this it will discuss both considered and accepted design options. The report will then focus on aspects of the project suggested for further consideration and potential construction, firstly to the west and then to the east of Two Waters Road. It is evident due to the consultation feedback and the analysis in this document that those interventions broadly to the west of Two Waters Road will be of a ‘light touch’ nature, and those to the east will be more comprehensive and long term. Heath Park Gardens will encompass both of these two concepts.

Further to the primary stated aims of this project there have been two supplementary aspects that BDP has been asked to investigate; these are the possibility of a canal boat mooring basin, and the feasibility of a fitness trail in the area.
5.1 Concept development

Having undertaken the objective analysis shown in section 3 and evaluating the feedback from consultation with the public and stakeholders, a design philosophy was developed to guide the future of the Two Waters area. It was apparent from the consultation that the moors are highly regarded as an asset to Hemel Hempstead so any large scale development should be avoided and their natural richness and heritage retained. However, the consultation and our analysis suggests that improvements to access, signage, ecology and biodiversity could be examined further.

The potential development of areas such as Box Moor Wharf (currently home to B&Q) and Corner Hall were more positively received. Any proposals will need to consider the guidance set out in the Local Plan, current lease agreements and income streams that some of the existing uses provide. The east side of Two Waters Road also has a series of natural habitats and watercourses that occupy this area towards the Apsley Triangle.

Therefore, the design philosophy suggests the west side of Two Waters Road is an area of ‘conservation’ whilst the east side is an area of ‘active change’. Proposals to the west, encompassing the moors will be regarded as ‘light touch schemes’ that will aim to protect and conserve the moors as working countryside while improving accessibility, use, aesthetics and biodiversity. The east side of Two Waters Road has greater opportunity for development, which should be sensitive to the local area and complimentary to any proposals to the west. These ideas should respond to the Local Plan in the first instance, although it may be challenged if necessary, and will require a longer term view for further testing and discussion with the relevant interested parties.
5.2 The Vision and Life of Two Waters and the Moors

This illustration reflects the range of uses and activities within the study area.
Environmental improvements and the development of low key outdoor recreational facilities are encouraged in the Local Plan (Policy 83, Recreation along the Grand Union Canal). Original canalside buildings such as the lock keeper’s cottage in Bulbourne Moor are to be protected and retained.

Any new buildings along the canalside should be sensitive in design and reflect the environmental and commercial requirements at Two Waters, whilst respecting the particular character of the canalside and reinforcing its sense of seclusion. Any new building’s primary elevation must face the canal.

New moorings and mooring basins are generally directed to urban areas but also to sites within the Green Belt on the basis of strict criteria under Policies 28 Residential Moorings and 84 (Location of Recreational Mooring Basins, Laybys and Residential Moorings on the Grand Union Canal).

New permanent moorings are directed to central Apsley and Apsley Mills (away from the semi-rural areas), both for short (up to 14 days) and long stay visitors and residents.

As with any development the construction of a mooring basin is a considerable financial undertaking, the revenue from which is only realised in time after opening. The financial model for mooring basins essentially work as owners rent moorings to boat owners, and the surrounds to commercial ventures such as cafes, bars and other retail opportunities where the mooring basin has added value and attracts people to the area.

Mooring basins are often closely financially linked to peripheral commercial activity, including bars, restaurants and other recreation facilities. Any on or offline mooring basin could provide an attraction to Two Waters and could promote Hemel Hempstead as a destination.

After having discussed the opportunity of an offline mooring basin with key stakeholders, including British Waterways, we consider the proposal of one in the Two Waters area not to be a viable proposition. This is due to the proximity of the mooring basin at Apsley, the potentially limited revenue against the considerable financial outlay to build the basin and the limited quantity of boat traffic passing through the area.

We do however consider a smaller layby mooring opportunity tied into any new development to the east of Two Waters Road on the canal to be extremely beneficial to any new development, and would provide interest and character in the area.

The Booxmoor Trust and British Waterways have previously undertaken studies examining the potential for a mooring basin within the study area at Balderson’s and Bulbourne Moors (shown below). Further studies shown here (right) evaluate the merit in providing a mooring basin at Two Waters.

Recommendations:
A mooring basin in the area is not recommended due to environmental and cost factors. There is also a limited market for this type of facility due to the nearby marina at Apsley. Online mooring opportunities should be encouraged.
6.0 Concept Options: West of Two Waters Road

6.1 Heath Park Gardens: A Welcoming Approach to Two Waters

Heath Park Gardens is a vital open space which ensures the character of the moors is drawn right into the Town Centre. However, at present the park feels like a space that lacks purpose. As it is, it has some good annual bedding displays, although low quality footways, a lack of street furniture and a poor entrance due to the underpass arrangement beneath the Plough roundabout means it is of limited value.

Three options have been explored with varying degrees of intervention and cost implications.

A series of basic proposals are suggested in all options:

- A pathway from the underpass to the Grand Union Canal (parallel to the River Gade) is proposed to strengthen the pedestrian links north-south and to create an alternative ‘countryside walk’ to the narrow footway of Two Waters Road. This path could connect into a potential new footbridge as shown in Section 6.2;

Variants of the Design Options

Minimal Intervention Option

The central ring of trees is retained and a plinth could be placed within the heart of this space as a place for public art events.

Moderate Intervention Option

The central ring of trees is retained, a wider, more defined path to the underpass is created which can be lined with seating and new lighting and further secondary paths are installed from Station Road. A series of timber decks are installed by the Gade to enhance interaction with the river. These are described further over the page.

Maximum Intervention Option

A simple open space is achieved in this scheme, by the removal of extraneous trees in the central space as well as the existing tree ring. To mitigate tree loss, new tree planting is proposed along Station Road and the new footpath link from the underpass. This is seen as the ‘promenade through the park’ with seating, lighting and tree planting.

East-west pathways are increased which tie into the ‘promenade’ and new timber decks overhanging the River Gade. A new bridge link is suggested over the Gade to tie into the existing pedestrian crossing over Two Waters Road. The space is simplified with large grass lawns gently contoured to reduce large scale ball games.

It is reasonable to assume that the existing underpass linking Heath Park Gardens to the Riverside development and the Town Centre will remain in operation until a long term strategy is in place which allows greater pedestrian movement at road level.

The concept option above aims to open up the south facing underpass entrance so it becomes more open to sunlight and allows greater visibility in and out for both safety and aesthetic reasons. By removing the vertical retaining walls and creating a wider entrance at the underpass level, a greater connection to the park is created. Visitors have more time to orientate themselves and can choose to navigate the ramp or a flight of steps onto the newly configured footpaths. Additional signage, lighting and public art through the underpass itself could also be incorporated into this proposal.
Two Waters Open Space Feasibility Study

Maximum Intervention

Recommendations:
A simple bold design is proposed for Heath Park Gardens to retain its aesthetic value as a green connection to the Town Centre. The existing tree planting should be reduced to allow greater views through the space and a new structure for footways and overall usage. Improvements to the underpass beneath the Plough Roundabout should be included within any Heath Park Gardens scheme.

Key of main features of plan
- New bridge improving connection to a path leading to an improved underpass.
- Tree planting to provide a buffer between the roads and the park while not restricting visual access.
- Mounding to restrict large scale ball games and for visual character.
- Dynamic path layout drawing people into the park.
- Removal of Corner Hall Rd and replacement with a footpath that takes pedestrians away from Two Waters Rd.
- Improved and more inviting cycling and pedestrian links.
6.2 Heath Park Gardens and River Gade Studies

Working with the water: Bulbourne, Gade and Grand Union Canal studies

In connection with the proposals for Heath Park Gardens, we propose a number of improvements to the River Gade that runs north to south along the park's eastern edge.

A new bridge would improve links and connections between the park and the surrounding area. This would also tie into more direct access to the underpass below the Plough Roundabout that connects Heath Park Gardens with the Town Centre.

We propose a hardwood timber deck, approximately 3-4m in width, supported from below and fully incorporating all DDA requirements.