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LANDSCAPE ARCHITECTS

TOWCESTER LANDSCAPE SENSITIVITY AND GREEN INFRASTRUCTURE STUDY

Prepared by Quartet Design

On behalf of the
West Northamptonshire Joint Planning Unit

June 2009

Disclaimer

It should be noted that, unless otherwise stated, the assessments made assume that sites and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by West Northamptonshire Joint Planning Unit (WNJPU) or Quartet Design, unless otherwise stated in the report.

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EXECUTIVE SUMMARY

The Towcester Landscape Sensitivity and Green Infrastructure Study has been prepared by Quartet Design on behalf of the West Northamptonshire Joint Planning Unit, who commissioned the study.

The Core Study Area incorporates all land within the area outlined in MAP 1 (QD42_100_01_RevB)

The study has been undertaken in three stages, and is set out accordingly.

Part A is a review of the baseline data, to gain an in-depth understanding of the natural and cultural resources of the area and how they contribute to the setting and character of Towcester. The results are presented as a series of drawings and also through text. This part is divided into four topics: Natural Systems; Land Use and Human Influences; Environmental and Visual Character, Northamptonshire Environmental Character Assessment and Green Infrastructure.

Part B is a sensitivity review. Landscapes and designated sites within the Study Area identified in Part A are given a level of sensitivity (high, high-medium, medium or low) in the context of potential large scale residential/mixed use development. The results are illustrated graphically and described through text. The sensitivity review includes three topics: landscape sensitivity, biodiversity sensitivity and cultural heritage sensitivity. In conclusion there is a combined sensitivity map, which brings all the results together showing areas of high, high-medium, medium and low combined sensitivity.

The aim of this part is to guide the relevant local planning authorities and developers to decisions that reduce any adverse impact on baseline resources and to provide some indication on the location, scale and type of development that may be appropriate in a particular area. It also indicates how development should respond positively to both the opportunities and constraints identified. Plans showing sensitivity and Green Infrastructure (GI) Networks help to identify areas where Green Infrastructure provision would be most beneficial and would enable positive responses and enhancement of the resource.

Part C is a Green Infrastructure strategy for Towcester. This part considers the opportunities for Green Infrastructure enhancement and consequential recommendations for an improved Green Infrastructure Network around the town.

Key "Green Infrastructure Routes" are identified which contain Primary Movement Networks, habitat corridors and Open Space sites. A series of Green Infrastructure projects are proposed which aim to address accessibility issues and also enhance Towcester's Movement Network, Open Space sites and Biodiversity Network.

1.0 INTRODUCTION

1.1 Background

- 1.1.1 Quartet Design has been appointed by the West Northamptonshire Joint Planning Unit (WNJPU) to prepare this Landscape Sensitivity and Green Infrastructure (LSGI) Study for Towcester. Officers from the West Northamptonshire Joint Planning Unit and South Northants Council have also had input during the production of the Study.
- 1.1.2 Quartet Design are located in north Buckinghamshire, adjacent to the area covered by South Northamptonshire Council (SNC) and have provided SNC with landscape services over a long period. Quartet Design are therefore very familiar with the study areas and the wider context and character of South Northamptonshire.
- 1.1.3 The sustainable Communities Plan identifies the Milton Keynes South Midlands (MKSM) Sub Region as one of four major areas of growth within the wider South East. Elements of the development planned for that growth area will take place within Northamptonshire, focused on the existing larger towns within the County, with an anticipated 62,125 new homes by 2026 within West Northamptonshire - East Midlands Regional Plan (March 2009). It is intended that this Study will help to inform decisions about the future expansion of the town and the infrastructure required to support that growth.
- 1.1.4 In the context of this study, the Green Infrastructure and landscape encompasses all of the environmental resource at the strategic scale, comprising landscape character and visual amenity, biodiversity and cultural heritage and the wider networks and inter-relationships of strategic green space, biodiversity and sustainable movement.

1.2 Methodology and Scope of the Report

The report has been based on similar reports produced for landscape sensitivity and green infrastructure studies in Daventry and Northampton. The report has been prepared as a technical study based on a desktop review of various levels of information obtained from other organisations that focus on the environment and related issues within Northamptonshire and associated areas.

- 1.2.1 Baseline information has been obtained from the River Nene Regional Park Community Interest Company.
- 1.2.2 In addition to the desktop review, a number of site visits have been undertaken to the study areas between September 2008 and January 2009. These surveys were undertaken to gather site information and carry out a visual assessment of the landscape components, to assist in assessing the landscape quality and sensitivity.
- 1.2.3 The site visits were limited to consideration of strategic aspects, rather than detailed issues associated with individual sites. As the study areas related to this report are smaller than those previously undertaken in Northamptonshire, the scope and process of assessment has incorporated appropriate local criteria and responses.
- 1.2.4 Further detailed work would be required to assess the environmental issues at a more site specific level.

The function of the report is to:

- provide a broad overview of baseline environmental resources.

- Identify and assess key landscape elements, biodiversity, watercourses, flood zones, cultural heritage and landscape character.
- Identify opportunities for the development of a green infrastructure system that provides recreational and wildlife elements to serve the local community and allow interconnectivity with adjacent areas.

1.2.5 The overall scope of this report is:

- To provide a broad overview of the baseline environmental resources.
- To assist the public sector agencies involved in growth decisions in their understanding of the relative sensitivity of the areas surrounding the town to proposals for growth.
- To progress the understanding of sensitivity in relation to green infrastructure and to use this to guide an optimal green infrastructure network linked to Towcester's growth.
- To contribute to the identification of an optimal green infrastructure strategy for Towcester as it grows.

1.2.6 It was not considered appropriate to establish optimal development scenarios through analysis and interpretation of baseline landscape, visual, heritage and biodiversity assets and the sensitivity assessment. The rationale for this was based on the premise that any optimal scenarios for Green Infrastructure and landscape would be highly dependent upon more detailed site specific surveys, and required complex balancing and weighting of the respective Green Infrastructure interests. This is largely a matter for the development plan process. The strategic level conclusions expressed from this study still risk being interpreted as determining preferred potential sites or areas for development. Notwithstanding this risk, the conclusions from the exercise have identified areas that would be more, or less, challenging for new development at a strategic scale and for which further study would be required before any definitive judgment should be made.

1.2.7 A series of plans have been prepared that illustrate where the sensitivity analysis has identified areas where there are significant constraints due to existing resources and also where Green Infrastructure provision would be most beneficial and provides opportunities for positive responses and enhancement of the resource. These plans will assist the Local Planning Authorities and developers in guiding decisions that reduce adverse impact on baseline resources and sensitivity to change as well as the location, scale and type of development that is appropriate.

Additional Considerations in respect of Green Infrastructure (GI) and Landscape

1.2.8 There is a broad objective to promote and deliver an integrated system of Green Infrastructure, encompassing biodiversity and sustainable movement networks and the incorporation of strategic landscape and open spaces to increase the limited existing open space provision for Towcester.

1.3 Report Framework

This report is presented in the following format:

- 1.3.1 PART A: Baseline Review (Local Context and Resource Review), discusses the green infrastructure and landscape, visual, biodiversity and cultural heritage baseline assets that are important when considering new mixed use development within the landscape around Towcester.
- 1.3.2 PART B: Sensitivity Review provides detail of the sensitivity analysis that has been undertaken within the core selected themes of cultural heritage, biodiversity, landscape and visual and flood-risk. This analysis seeks to identify and highlight particularly sensitive assets to enable decision makers to consider the appropriateness of new development in and around the town.
- 1.3.3 PART C: Green Infrastructure Strategy examines the infrastructure requirements for Towcester and sets out a Green Infrastructure Strategy, providing opportunities to enhance the Sustainable Movement Network, Open Spaces and biodiversity of the area.
- 1.3.4 Appendix 1 contains a list of datasets used in the Study
- 1.3.5 Appendix 2 contains a glossary of technical terms and acronyms
- 1.3.6 Appendix 3 contains a reference list.

PART A: BASELINE REVIEW (LOCAL CONTEXT AND RESOURCE REVIEW)

2.0 APPROACH TO THE BASELINE REVIEW

2.1 Introduction – Environmental Assets

- 2.1.1 The strategic nature of this assessment and the necessity to identify a core study area through which an assessment of Towcester could be undertaken should not limit the geographical scope of future, more detailed landscape and visual assessments, perhaps undertaken as part of Landscape and Visual Impact Assessments for new developments in and around the town. For example, where new development is assessed as having a visual impact beyond the Core Study Area boundary, it may be necessary or appropriate to develop landscape interventions in the wider landscape to mitigate their adverse impact. As a consequence of the nature and scale of this strategic assessment it has not been possible to identify all the detailed issues that may arise as a result of different types of development in and around the town.
- 2.1.2 To aid the presentation of data, the Core Study Area has been divided into six Study Areas. Each Study Area encompasses an area of land, which is broadly consistent in terms of landscape character and the designations within it. Therefore there is minimal repetition of information and the key issues relating to each of the Study Areas can be easily seen and addressed.

The core study area boundaries are based on physical elements to define the extent of the study. These elements include roads, watercourses, topographical features and visual horizons. Each study area defines an area of land which is broadly consistent in terms of landscape character and qualities.

The study areas identified are as follows:

1. Easton Neston
2. Wood Burcote
3. Porterswood
4. Swinneyford
5. Greens Norton
6. Caldecote

2.2 Methodology

- 2.2.1 The section begins with an overview of assets (the Baseline Review) and draws upon a number of sources of information, including baseline datasets supplied by the River Nene Regional Park Community Interest Company (RNRP CIC) and the findings of primary research and field assessment. A consultation with the project Steering Group has also contributed to the summary of key landscape and environmental assets that exist within the Core Area and in the wider landscape where relevant. Illustrations of the baseline data are provided in **MAPS 1 TO 11** (QD42_100_01 to 11 Rev B).
- 2.2.2 A full list of the datasets used during this assessment is presented in **Appendix 1**.

2.2.3 The Baseline Review describes assets under a series of “subjects”. These subjects have then been grouped into themes to facilitate their interpretation. A summary list follows:

NATURAL SYSTEMS

- Landform
- Watercourses and flood zones
- Nature Conservation and Biodiversity
- Woodlands and Forests

LAND USE AND HUMAN INFLUENCES

- Cultural Heritage
- Strategic and Local Green Space
- Access and Movement
- Transport Infrastructure
- Strategic Agricultural Land Classification
- Countryside and Environmental Stewardship Agreements

ENVIRONMENTAL AND VISUAL CHARACTER

- Visual Baseline Analysis

NORTHAMPTONSHIRE ENVIRONMENTAL CHARACTER ASSESSMENT

- RNRP Environmental Character Assessment (ECA)
- RNRP Current Landscape Character Assessment (CLCA)
- RNRP Historic Landscape Character Assessment (HLCA)
- RNRP Biodiversity Character Assessment (BCA)

STRATEGIC GREEN INFRASTRUCTURE

- Strategic Green Infrastructure (proposed)

2.2.4 Following on from the Baseline Review is the Sensitivity Review (refer to Part B). This takes the information gathered during the Baseline Review and assesses the sensitivity of key features at the strategic scale of assessment.

3.0 NATURAL SYSTEMS

3.1 Landform

3.1.1 Refer to MAP 3.1(QD42_100_03-1 Rev B).

3.1.2 The existing community of Towcester sits within a low contour area, created by the River Tove valley and associated watercourse corridors. The built form of the existing town occupies the lower contours within the general area, with significant areas of flood plain being associated with local watercourses and in particular the River Tove Corridor.

3.1.3 Area 1 is dominated by the historic estate of Easton Neston, which retains a lot of the historic landscape components. Set within sweeping contours which create a series of undulations, rising from the river valley towards the higher contours around Easton Neston House and Showsley Grounds. Towcester racecourse is also located in this area.

3.1.4 The topography of Area 2 is composed of a series of undulating contours which create interesting level variations through the local area, creating an intimate and varied character.

- 3.1.5 Area 3 is located on the highest contours and is exposed to views to the north and south. The majority of the slope is north facing.
- 3.1.6 The contours within Area 4 are low and flat and contain the A43 corridor and Silverstone Brook. There is a gentle slope rising towards Wood Burcote on the southern edge.
- 3.1.7 Area 5 has mainly low river valley contours, with gentle rising contours to Greens Norton and Costwell Farm.
- 3.1.8 The landform within Area 6 varies from the local contours associated with the river valley to the higher contours related to the termination of the two ridge lines, which run northwards from the area.
- 3.2 Watercourses and flood zones
- 3.2.1 Refer to MAP 4 (QD42_100_04 Rev B).
- 3.2.2 Flood Plain information is sourced from the Environment Agency's interactive mapping system which can be found at www.environment-agency.gov.uk
- 3.2.3 The principal areas affected by flooding and flood zones are associated with the River Tove corridor and land associated with Silverstone Brook.
- 3.2.4 The River Tove flood plain zone floods following periods of heavy rainfall. The Environment Agency have strengthened the flood prevention for Towcester and the flood plains to the west offer flood storage together with the areas of Belle Baulk.
- 3.3 Nature Conservation and Biodiversity
- 3.3.1 Refer to MAP 9 (QD42_100_09_Rev B).
- 3.3.2 The local and potential wildlife sites are based on up to date information received from Heather Ball, Conservation Officer (Northamptonshire) for The Wildlife Trust for Bedfordshire, Cambridgeshire, Northamptonshire and Peterborough: www.wildlifebcnp.org
- 3.3.3 The study areas contain six local wildlife designations and four potential wildlife designations, these sites include neutral grassland, woodlands, ancient woodlands and lowland meadows/ wetlands.
- 3.3.4 There are disused railway lines running through Areas 1, 5 & 6, these are significant features in the area and have significant biodiversity value and provide potentially good habitat corridors.
- 3.4 Woodlands and Forests
- 3.4.1 The core area contains a modest range of small woodlands, including some ancient woodland, natural and semi-natural native broadleaf trees together with some groups of non-native conifers. There are areas of more significant elements of woodland associated with Area 1: Easton Neston and Area 2: Wood Burcote. There are individual trees associated with hedgerows and field patterns. The mosaic of woodlands around Easton Neston form part of the Yardley-Whittlewood ridge; a distinctive area identified by patches of woodland on clay soils along the ridge between Whittlebury and Yardley Hastings.
- 3.4.2 Burcote Wood is managed by The Woodland Trust who have long term aims to increase biodiversity and conservation. The wood is currently comprised of native broadleaf trees but

the trust intend on creating a mature (W8 type) high forest (Fraxinus excelsior- Acer campestre- Mercurialis perennis) woodland.

3.5 Grasslands and Wetlands

The river corridors in and around Towcester and the disused railway line are important biodiversity features and provide habitat corridors through the area. The railway line is recognised as a Local Wildlife Site to the north of Towcester because of the neutral grassland flora that is present there. Other sections of the railway line may also support this habitat, but in many places scrub and trees will have colonised. The river corridors still contain examples of floodplain grassland and lowland meadows, but little is known about these in the Towcester area. These are important elements of the floodplain, and are often lost to changes in hydrology, agricultural intensification and development. Watercourses and ditches in the area have been home to water voles and white-clawed crayfish in the past, both of which are of conservation concern.

3.5.1 There are no areas of forest within the core area.

3.6 Natural System Assets

Designations and notable habitats within the study areas are listed below:

3.6.1 Study Area 1: Easton Neston

Woodlands primarily associated with Easton Neston
 River Channel or Major Watercourse – River Tove corridor
 Water body
 Flood Plain associated with the River Tove corridor
 1 LWS Cappenham Bridge Drain

A major element of the area is the historic landscape and gardens at Easton Neston, providing details and legacy of the ‘grand’ design style of the English landscape movement of the 18th century. This area is a registered park and garden.

Contains an area of flood plain associated with the River Tove and offers specific wildlife and habitat biodiversity opportunities

3.6.2 Study Area 2: Wood Burcote

Woodlands
 1 LWS Wood Burcote Wood
 River Channel or Major Watercourse
 The above elements provide varied Potential Wildlife Sites

3.6.3 Study Area 3: Porterswood

1 LWS Wood Burcote Wood
 1 PWS Porterswood Farm
 Woodlands and Forests
 River Channel or Major Watercourse

3.6.4 Study Area 4: Swinneyford

River Channel or Major Watercourse
 Flood Plain

3.6.5 Study Area 5: Greens Norton

River Channel or Major Watercourse
Flood Plain

River Tove corridor and flood plain provides elements of wildlife habitat and biodiversity

1 LWS Greens Norton Disused Railway

1 PWS Greens Norton Disused Railway

3.6.6 Study Area 6: Caldecote

3 LWS (Tiffield Disused railway (South), Tiffield Lake and Tiffield Quarry)

2 PWS (Bairstow Lodge and Tiffield Road disused pit)

Woodlands and Forests

River Channel or Major Watercourse

Water body

Flood Plain

Contains elements of woodland and significant hedgerows

Disused railway, providing a major element of wildlife habitat & biodiversity

Protected Wildflower verges (Towcester to Tiffield Road)

4.0 LAND USE AND HUMAN INFLUENCES

4.1 Cultural Heritage

4.1.1 Refer to MAP 10 QD_42_100_10_Rev B). This shows designated heritage sites within the Towcester area. For example; historic parks and gardens, conservation areas, listed buildings and their settings. Other areas such as ridge and furrow and dismantled railways have also been highlighted.

Towcester was a significant Roman settlement, the A5 was a Roman road and this provides an historic corridor through the core area.

4.1.2 There are many other Known Archaeological Assets within the core study area; these represent a wide variety of archaeological sites and periods. The information shown on MAP 14 (QD_42_100_14) illustrates historic and environmental information in the area, ranging from historic monuments, sites or even objects found in these locations to events such as an earthwork surveys or archaeological walks. These assets are not all registered, but are a material planning consideration. Therefore any impact upon these sites would have to be fully assessed at the planning application stage and adequate consultation with the relevant stakeholders will be required. The information is collected from Northamptonshire County Council Historic Environment Offices' database, County Hall, George Row, Northampton. Contact Katherine on 01604 237246 for further information.

4.1.3 It is important that the setting of historic assets is considered, as well as the site itself. For example, historic parks and gardens frequently "borrow views" from outside the designated area, such as when an avenue is aligned on a view of a folly or piece of architecture. Similarly, a Scheduled Monument designation for a deserted medieval village may not include the field systems, which surrounded it. Defining the setting for each historic asset is beyond the remit of this study. However, it will need to be considered as part of more detailed future assessments on a case-by-case basis.

4.1.4 There is one location of registered ridge and furrow land within Study area 1: Easton Neston. 'Ridge and furrow earthworks, produced by medieval cultivation that were once a familiar sight across many parts of England, are now a rare archaeological resource. Major rural changes, spurred on by wartime pressures and economic incentives and the impact of

modern agriculture on the last of the medieval cultivation patterns has had a severe impact. Between 1995 and 1999 Northamptonshire County Council and English Heritage Plough quantified the survival of medieval open fields in the east Midlands.

- 4.1.5 The results of this research have now been published in Turning the Plough and confirm that the loss of these ridge and furrow landscapes is extreme. English Heritage, DEFRA and other agencies are now faced with an urgent task – to combine their efforts in order to create a sustainable future for what little remains'

4.2 Strategic and Local Green space

- 4.2.1 Refer to MAP 9 (QD_42_100_09 Rev B) which locates the principle areas of open space.
- 4.2.2 South Northants Council have recently produced/are currently producing Open Space, Sport and Recreation audits/ PPG17 Assessments (see Appendix 3 for full references). The results of these assessments have informed MAP 9.
- 4.2.3 Local Accessible Green spaces include small woodlands with public access and other accessible Green spaces such as common land, village greens, pocket parks and millennium greens. Pocket Parks are open areas of land, which are owned and managed by local people, providing free, open access for all at all times. They help to protect and conserve local wildlife, heritage and landscape.
- 4.2.4 Towcester town has inadequate open space provision, which is fragmented and limited in resources. There is an absence of coherent and linked open space, which creates a lack of connectivity and access. The principal areas of open space are located in Belle Baulk (adjacent to the River Tove), the Silverstone Brook corridor and a section of flood plain associated with the River Tove north of the old Towcester Road. Formal recreation facilities are provided at the Towcester Leisure Centre.
- 4.2.5 There are two Pocket Parks within the core study area; Towcester Pocket Park, managed by Nicholas Hawksmoor Pocket Park Committee, and Greens Norton, managed by Greens Norton Pocket Park Group, both groups are made up from volunteers from the local community.

4.3 Access and Movement

- 4.3.1 Refer to MAP 5 (QD_42_100_05 Rev B).
- 4.3.2 Towcester and its surrounding area are well served by public rights of way.
- 4.3.3 Local Assets - Local Level Sustainable Route-ways include byways, bridleways, footpaths and other cycle routes (e.g. cycle/bus lanes, cycleways on roads, shared use paths). There is a high concentration of byways, bridleways and footpaths throughout the study area. Some follow the routes of dismantled railways others follow lanes and paths, many of which are very long-established, following parish boundaries and other ancient features in the landscape.
- 4.3.4 The Grafton and Knightly Way Long Distance Footpath passes close to the western edge of Towcester. This historic route is a combination of two footpaths which merge at Greens Norton. Grafton Way is the southern section of the route which connects with Towcester, The Grand Union Canal and Milton Keynes where it joins with the North Bucks Way providing a continuous route through Aylesbury and the Chilterns. Knightly Way is the northern section of the route which connects with Litchborough, Badby and links to the Nene Way.

4.4 Transport Infrastructure

4.4.1 Refer to MAP 6 (QD_42_100_06 Rev B).

4.4.2 The principal 'A' road system associated with Towcester is the A5 running north-south and the A43 running east-west, creating a junction of key routes at Towcester. The A43 gives access to the M1 in the east, the M40 to the west, together with connections to the southwest of England, and is a principal transport route. All access to Towcester is road-based with no local railway provision. The nearest rail facilities are located at Northampton and Milton Keynes. Bus services are limited to local services, which provide connections with Northampton, Milton Keynes, Bicester and Oxford.

4.4.3 Smaller villages are connected with each other and with Towcester by a dense network of 'B' roads and minor roads. They include at least one Roman road and many of the lanes are historic features of the landscape.

4.5 Strategic Agricultural Land Classification

4.5.1 Refer to MAP 7 (QD_42_100_07).

4.5.2 MAP 7 is only to be used as general guidance.

The information for this map is sourced from www.magic.gov.uk and is the most up to date reference available for the Towcester area. The Agricultural Land Classification for these areas falls predominantly into Class 3 with small pockets falling into Class 4 category, excluding urban areas such as Towcester town centre. For more up to date survey information for specific areas of land a private survey will have to be carried out. For more information please visit www.naturalengland.org.uk and search for Agricultural Land Classification.

4.6 Countryside and Environmental Stewardship Agreements

4.6.1 Refer to MAP 8 (QD_42_100_08 Rev B).

4.6.2 Countryside Stewardship Agreements (CSA) closed to new applications in 2005 and was replaced by the current Environmental Stewardship Agreement system, however existing CSAs should complete their terms and these areas are illustrated in the referenced drawing above. The agreement is a scheme for farmers who operate outside environmentally sensitive areas, which allows them to receive grants to manage the countryside, for example maintaining hedgerows, conserving historic farm buildings and medieval settlements. By doing this, they help to conserve the landscape and its wildlife, whilst improving public access to the countryside.

4.6.3 Large areas of the quadrants within the core area are covered by Environmental Stewardship Agreements whilst a small number of Countryside Stewardship Agreements still remain in the countryside around Towcester town centre.

4.7 Land Use and Human Influence Assets

Notable assets within the Study Areas are listed below:

4.7.1 Study Area 1: Easton Neston

Easton Neston Registered Parks & Gardens

The conservation areas at Hulcote, Easton Neston and Towcester town centre

Ridge and Furrow

Sites of Archaeological Interest

Environmental Stewardship Agreements
The historic area of the racecourse
Public Rights of Way

4.7.2 Study Area 2: Wood Burcote

Wood Burcote Non-Registered Parks & Gardens
Environmental Stewardship Agreements
Public Rights of Way

4.7.3 Study Area 3: Porterswood

Sites of Archaeological Interest
Environmental Stewardship Agreements
Public Rights of Way
Contains rights of way, providing connection to Whittlebury and Paulerspury

4.7.4 Study Area 4: Swinneyford

Sites of Archaeological Interest
Environmental Stewardship Agreements
Public Rights of Way
Accommodates A43 transportation corridor

4.7.5 Study Area 5: Greens Norton

Environmental Stewardship Agreements
Public Rights of Way

4.7.6 Study Area 6: Caldecote

Conservation area at Tiffield
Environmental Stewardship Agreements
Public Rights of Way
Long-distance link to the Grand Union canal at Blisworth

5.0 ENVIRONMENTAL AND VISUAL CHARACTER

5.1 Landform

5.1.1 Refer to MAP 3.1 (QD_42_100_03-1 Rev B)

5.1.2 Towcester is located on the low contours of the River Tove and its associated flood plain. The surrounding land rises to create a series of ridges which form the river corridor and valley character of the area; this also creates an “enclosed” character to the existing town. The ridges and higher contours surrounding Towcester provide long distance views beyond the study area and are visually exposed to the surrounding countryside.

5.2 Notable environmental and visual character assets within the Study Areas are listed below:

5.2.1 Study Area 1: Easton Neston

- The high quality landscape character is created by the combination of undulating topography, small scale field pattern and wildlife habitat.

5.2.2 Study Area 2: Wood Burcote

- This area is a very attractive landscape with introverted small scale landscape character created by small paddocks and hedgerow division.
- High content of trees, hedgerows and woodlands, creating definition and sub-division of space, with undulating topography, creating enclosure and intimacy. These elements combined, achieve a unique quality and character in this area.
- Wood Burcote is administered by the Woodland Trust.

5.2.3 Study Area 3: Porterswood

- Large scale field pattern with limited hedges.
- Limited woodland, hedgerows and trees within the area.
- Predominantly north facing slope to the contours.
- Limited landscape 'texture' providing a bland landscape character.

5.2.4 Study Area 4: Swinneyford

- Open field pattern with large field units.
- No significant woodland, hedgerows or trees.
- Relatively flat contours, giving a bland landscape character.
- Contains the Silverstone Brook corridor, which offers limited opportunity for wildlife habitat.

5.2.5 Study Area 5: Greens Norton

- The area contains limited trees and hedgerows with no significant landscape quality or structure.
- Predominantly south facing slopes.

5.2.6 Study Area 6: Caldecote

- Smaller field pattern, creating a more varied landscape tapestry.
- Varied topography, rising to higher contours to the north and providing views to the south.

6.0 NORTHAMPTONSHIRE ENVIRONMENTAL CHARACTER ASSESSMENT

6.1 Introduction

- 6.1.1 Numerous planning authorities have carried out Landscape Character Assessments for their administrative areas. In 2006 the RNRP CIC along with NCC produced a series of character assessments for Northamptonshire in order to provide a detailed characterisation of the county.

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- 6.1.2 Refer to MAPS 15, 16, 17 & 18 (QD42_200_15, 16, 17 & 18) These maps show the Environmental Character Assessment (ECA), Current Landscape Character Assessment (CLCA), Historic Landscape Character Assessment (HLCA) and Biodiversity Character Assessment (BCA). The drawings are based on data supplied and licensed by RNRP CIC.
- 6.1.3 Due to the strategic scale of this study in many cases the character for each assessment type covers large parts of the study areas.
- 6.1.4 Details of each character type within each study area are listed below:
- 6.2 **Environmental Character Assessment (ECA)**
- 6.2.1 Study Areas 1-6
Tove and Ouse Catchments
- 6.3 **Current Landscape Character Assessment (CLCA)**
- 6.3.1 Study Area 1
Part Undulating Claylands
Part River Valley Flood Plain
- 6.3.2 Study Areas 2-6
Undulating Claylands
- 6.4 **Historic Landscape Character Assessment (HLCA)**
- 6.4.1 Study Area 1
Part Urban
Part 19th Century Parliamentary Enclosure
Part Fragmented Parliamentary Enclosure
- 6.4.2 Study Area 2
Part Urban
Part 19th Century Parliamentary Enclosure
Part Woodland
- 6.4.3 Study Area 3
Part 19th Century Parliamentary Enclosure
Part Woodland
- 6.4.4 Study Area 4
Part 19th Century Parliamentary Enclosure
Part Woodland
Part Fragmented Parliamentary Enclosure
- 6.4.5 Study Areas 5 & 6
Part Fragmented Parliamentary Enclosure
- 6.5 **Biodiversity Character Assessment (BCA)**
- 6.5.1 Study Areas 1
Part Urban
Part Cropped Claylands
Part Limestone Slopes
Part Minor Flood Plain
Part Boulder Clay Woodlands

6.5.2 Study Areas 2 & 3
Part Limestone Slopes
Part Boulder Clay Woodlands

6.5.3 Study Areas 4
Part Limestone Slopes
Part Minor Flood Plain
Part Boulder Clay Woodlands

6.5.4 Study Areas 5
Part Limestone Slopes
Part Cropped Claylands
Part Minor Flood Plain
Part Liassic Slopes
Part Boulder Clay Woodlands

6.5.5 Study Areas 6
Part Cropped Claylands
Part Limestone Slopes
Part Liassic Slopes
Part Minor Flood Plain

7.0 STRATEGIC GREEN INFRASTRUCTURE

7.1 Introduction and Background

7.1.1 The following section provides a baseline review of the Green Infrastructure resource for Towcester and draws from the findings of the Northamptonshire Strategic Green Infrastructure Assessment: "Green Infrastructure - Making the Connection".

7.1.2 The Northamptonshire Strategic Green Infrastructure (GI) Assessment identifies a series of strategic and local Green Infrastructure corridors, as well as two connective networks: the Biodiversity Network and the Sustainable Movement Network. These are described below.

7.2 The West Northamptonshire Biodiversity Network

7.2.1 Refer to MAP 13 (QD42_100_13 Rev B).

7.2.2 The Strategic Biodiversity Network seeks to connect fragmented habitats displayed across much of the county in order to assist species' persistence and habitat function. The network presented in the Northamptonshire Green Infrastructure Strategy identifies a range of habitat reservoirs and potential habitat links.

7.3 The Sustainable Movement Network for West Northamptonshire

7.3.1 Refer to MAP 13 (QD42_100_13 Rev B).

7.3.2 The Sustainable Movement Network identifies the principal networks and opportunities for sustainable people movement from centres of settlement to the countryside. By building upon the network of existing rights of way, it seeks to link assets and destinations to villages and towns with a hierarchy of routes that, where possible, takes advantage of areas of green space.

7.3.3 The network is described as operating from doorstep to countryside, within a structured hierarchy, with each level performing a separate function.

7.3.4 A network of Primary and Secondary routes is identified for the entire county. A network of Local Connectors has also been proposed for Towcester.

7.3.5 The tiers in the movement hierarchy are described below:

Primary Green Way

- Strategic links between major settlements through open countryside, composed of the Public Rights of Way (PROW) network and cycle routes.

Secondary Greenway - Countryside Connectors

- Link towns, villages and hamlets, as well as assets in the wider countryside, composed of the PROW network and cycle routes.

7.4 Strategic Green Infrastructure Corridors

7.4.1 Refer to MAP 13 (QD42_100_13 Rev B).

7.4.2 The Green Infrastructure Strategy (MAP 13) is a local network composed of identified movement corridors combined with the biodiversity network. The principal of the strategy is to maximise the benefit of recreational use with linked biodiversity corridors. Refer to paragraphs 9.2.3 and 9.2.4 for further information.

7.4.3 The Green Infrastructure Strategy should be regarded as a conceptual framework to aid the decision-making process with regards to Green Infrastructure delivery on the ground. It is not intended to be prescriptive or inflexible and as a consequence, the network delivered in the longer term may vary depending on a multitude of strategic and local issues, not least those relating to the aspirations of local communities, land ownership and a changing development context.

7.4.4 MAP 13 shows an order of priority for green route development and is further explained in Part C.

PART B: SENSITIVITY REVIEW

8.0 SENSITIVITY REVIEW

8.1 Introduction and Methodology

8.1.1 The following section assesses the sensitivity of landscapes together with landscape, biodiversity and cultural heritage features under a series of key themes derived from the baseline information. However, consideration is given to other baseline datasets and information sources to provide a comprehensive overview and context.

8.1.2 It is essential that a clear definition of the term 'the particular type of change or development' is established, as this provides the reference for the consideration of the sensitivity of landscapes and environmental features to the specific change and its type and scale. In the context of this study, 'change or development' is defined as major mixed-use urban extension development in excess of 5ha.¹

8.1.3 It is important to note that the findings of this Sensitivity Assessment are not applicable to the sensitivity of the landscape or environmental features to other types of development. For example major infrastructure such as road or rail schemes, or renewable energy initiatives such as wind farms. As such, the following section presents an examination of the environmental resource within and around Towcester under a series of Strategic Themes. Reference to supporting plans is made where relevant.

8.1.4 At the national level, the area around Towcester can be identified as being of moderate to low landscape sensitivity, because of the absence of any national landscape designations (Area of Outstanding Natural Beauty, National Park). However, for the purposes of this assessment a more localised review of sensitivity has been undertaken, observing local assets and their sensitivity.

8.1.5 The assessment of landscape sensitivity has therefore been undertaken at the strategic scale using information and data that have been available at the scale of the study. As such, judgements on the inherent sensitivity of landscapes, views and features are considered at this broad scale. More detailed research and further site-specific assessment would be necessary to confirm the levels of sensitivity attributed to individual features.

8.2 Sensitivity Categories and Definitions

The sensitivity analysis has been assessed under the following three main themes:

- **Landscape**
- **Biodiversity**
- **Cultural Heritage**

8.2.1 Sensitivity is assessed under four categories: High, High/Medium (biodiversity and landscape/visual only), Medium and Low. A summary of the definition of each sensitivity category is provided below.

8.2.2 Whilst sensitivity analysis across the three main themes identifies areas that may be regarded as being of High, High/Medium, Medium and Low sensitivity to new development, it does not necessarily preclude development, which may, through appropriate design and planning, be able to offer greater certainty in the long term protection and potential

¹ This 5ha threshold is derived from an interpretation of EIA Regulations Indicative Thresholds and Criteria

enhancement of features, or indeed make a positive contribution to the town and its visual setting.

- 8.2.3 The presence of significant overhead electricity cables and pylons has been considered in the assessment of landscape character and quality. These are considered to be a negative quality and a significant distracter within the landscape.

8.3 Landscape Sensitivity Assessment Criteria

- 8.3.1 Refer to MAP 12 (QD42_100_12_Rev B)

8.3.2 Sensitivity Assessment

The baseline landscape character and quality was evaluated using the Landscape Institute/IEMA guidelines² and its classification follows a five point scale interpreted as follows:

8.3.3 Highest Quality Landscape:

Includes the most aesthetically attractive landscape.

Areas of particular Natural Beauty perceived as special in a regional or national context. Nationally designated land such as National Parks, AONBs etc.

8.3.4 Very Attractive Landscape:

Areas include historic and designated landscape.

Diverse, semi-natural or farmed landscape with natural features. Normally abundant woodland cover together with a high distribution of trees, hedgerows and shrubs, streams, brooks and other naturalised unpolluted water corridors may be present. Several local landscape designations may apply, including Conservation Areas and some historical or cultural sites may be present.

8.3.5 Good Quality Landscape:

Countryside with some variety in farmland cover.

Settlements and villages with pockets of open space and public recreation areas. There is a reasonable distribution of semi-natural vegetation, trees and shrub cover and the overall view of the area is pleasant. Local landscape designations of cultural and historic value may be present.

8.3.6 Ordinary Quality Landscape:

Typical open agricultural land where attractive features are offset by detractors.

Some strategic planning is evident but development is primarily functional including housing estates, business parks or urban fringe land uses. Not particularly aesthetically attractive, but with more value than a poor quality landscape. Land may be within a Greenbelt or have a local landscape designation.

8.3.7 Poor Quality Landscape:

Includes detractors such as power lines, industrial, derelict or inappropriate built forms with no aesthetic value or evidence of strategic planning. There is lack of mature vegetation cover and no landscape designations apply. Intensively farmed landscape, which has lost most of its features.

² Landscape Institute and IEMA (2002) *Guidelines for Landscape and Visual Impact Assessment, 2nd Edition*.

Sensitive Landscape Receptors and Magnitude of Impact

Sensitivity (vulnerability of receptor to change)		Magnitude (size, extent and duration of impact)
Landscape of particularly distinctive character, susceptible to relatively small changes	High	Noticeable change in landscape characteristics over an extensive area ranging to very intensive change over a more limited area
Landscape of good character and quality, susceptible to change	High/Medium	Noticeable change in landscape over a distinct area and location
Landscape of moderately valued characteristics, reasonably tolerant of changes	Medium	Moderate changes in localised area
A relatively unimportant landscape, the nature of which is potentially tolerant of substantial change	Low	Slight change in any components
An unimportant landscape capable of substantial change	Not sensitive	Virtually imperceptible change in any components

8.3.8 The sensitivity of a landscape receptor is therefore based on the character and quality of the landscape and its ability to accommodate change.

8.3.9 This assessment considers and assesses heritage and biodiversity features as a component of the landscape resource. Sensitivity scores have been attributed to features identified in the baseline data. The aim of this exercise has been to produce a sensitivity analysis of heritage and biodiversity features which uses the designation level of a site as a starting point of determining sensitivity, but which then applies professional knowledge and judgement to upgrade the sensitivity levels of lower-designation and non-designated sites where appropriate. This results in a far more accurate sensitivity assessment of heritage and biodiversity features and is therefore a much more valuable tool than a mechanistic assumption of sensitivity based purely on a site's level of designation.

8.3.10 It should be noted that the process was a combination of a desk-based review and site visits, which were undertaken for further investigation/verification of the features identified within this study. Confirmation of the survival of features assessed under these themes and their inherent sensitivity would be required at the more refined level of analysis and investigation, such as that conducted as part of an Environmental Statement.

8.4 Landscape Sensitivity Assessment

8.4.1 The assessment of landscape and visual sensitivity has been undertaken at a strategic level. The following sections identify the overall sensitivity of the landscape within each Study Area based upon the primary landscape characteristics identified. Given the impact of local landform and vegetation on the landscape at the local (scheme) level, more detailed site-specific appraisals would be required to reach a definitive position on actual sensitivity to change. These would need to be undertaken for a specific development proposal.

8.4.2 Landscape and visual sensitivity takes account of topography (which affects visibility), and also the function of the landscape. For example, does an area function as a strategic gap, or make a distinctive contribution to the setting of Towcester or one of the surrounding villages?

8.4.3 Study Area 1: Easton Neston

This area is a very attractive landscape with a very high level of landscape sensitivity, achieved by a combination of landscape and environmental characteristics:

- The high quality landscape character is created by the combination of undulating topography, small scale field pattern and wildlife habitats.
- A major element of the area is the historic landscape and gardens at Easton Neston, providing details and legacy of the 'grand' design style of the English landscape movement of the 18th century. This area is a registered park and garden.
- Low key and small scale agricultural techniques, combined with areas of retained ridge and furrow pasture, creating an interesting visual pattern in the landscape.
- The historic area of the racecourse.
- Contains an area of flood plain associated with the River



8.4.4 Study Area 2: Wood Burcote

- This area is a very attractive landscape and is an area of high landscape sensitivity, with introverted small scale landscape character created by small paddocks and hedgerow division.
- High content of trees, hedgerows and woodlands, creating definition and sub-division of space, combined with undulating topography, creating enclosure and intimacy. These elements aggregate to achieve a unique quality and character to this area.



8.4.5 Study Area 3: Porterswood

- Medium sensitivity because the area is located on higher contours and is exposed to distant views to the north and south:
- Large scale field pattern with limited hedges.
- Limited woodland, hedgerows and trees within the area.
- Predominantly north facing slope to the contours.
- Limited landscape 'texture' providing a bland landscape character.
- Contains rights of way, providing connection to Whittlebury and Paulerspury.



8.4.6 Study Area 4: Swinneyford

This area is considered to be of ordinary landscape quality, with low to medium sensitivity due to:

- Open field pattern with large field units.
- No significant woodland, hedgerows or trees.
- Accommodates A43 transportation corridor.
- Relatively flat contours, giving a bland landscape character.



8.4.7 Study Area 5: Greens Norton

This area is considered of low to medium landscape sensitivity due to the large open field pattern, providing open and bland landscape quality:

- The area contains limited trees and hedgerows with no significant landscape quality or structure.
- Predominantly south facing slopes.



8.4.8 Study Area 6: Caldecote

An area of medium to high landscape sensitivity, achieved by the combination of:

- Smaller field pattern, creating a more varied landscape tapestry.
- Contains elements of woodland and significant hedgerows.
- Varied topography, rising to higher contours to the north and providing views to the south.



8.5 **Biodiversity Sensitivity Assessment Criteria**

- 8.5.1 The area of statutory sites important for biodiversity in the region is well below the national level. Overall there has been significant decline in biodiversity and to compensate for past losses, regional habitat restoration and creation targets need to be proportionally greater than in other regions. The significantly low regional proportion of woodland cover offers a specific opportunity for habitat creation.
- 8.5.2 PPS 9 recognises that Local Wildlife Sites have a fundamental role to play in helping to meet overall national biodiversity targets, contributing to the quality of life and the well-being of the community, and in supporting research and education.
- 8.5.3 All recognised biodiversity and nature conservation sites were graded according to their designation. PWS are sites where the correct conditions may still exist to form the starting point for creation of habitats and green corridors, and without thorough surveys we cannot rule out the possibility that a site contains a high level of biodiversity.

8.5.4 High Sensitivity

In accordance with PPS9, Internationally and nationally-designated sites (i.e. Sites of Special Scientific Interest (SSSIs) have been graded as high sensitivity in order to ensure a maximum level of protection. However there are no internationally and nationally-designated sites this study area.

8.5.5 High-Medium Sensitivity

PPS 9 recognises that Local Wildlife Sites have a fundamental role to play in: *helping to meet overall national biodiversity targets; contributing to the quality of life and the well-being of the community, and in supporting research and education.* This is particularly the case in Northamptonshire, which has a much lower proportion of its area designated SSSI (2% instead of the national average of 7.5%). SSSI designations in Northamptonshire do not currently take into consideration the key principles of habitat connectivity or adaptation to climate change. Local Wildlife Sites are therefore the best examples of particular habitats or species assemblages in Northamptonshire, and play a major role in connecting areas of land with important biodiversity.

Wildlife sites with public access, which perform biodiversity, recreational and educational functions are also considered to be of high-medium sensitivity.

8.5.6 Medium Sensitivity

Non-designated sites within habitat networks, which are of national importance, as described in PPS9, are considered to be of medium sensitivity. Consequently, such sites have been included in the medium sensitivity category. Also included in the medium sensitivity category are Potential Wildlife Sites which have been surveyed and are connected to other biodiversity sites.

In some instances the exact nature of the resource may not be fully understood or documented, within areas identified as medium sensitivity may be possible, although further investigation will be required to fully evaluate the significance of the features and areas of landscape.

8.5.7 Low Sensitivity

This category includes Potential Wildlife Sites which have not been surveyed and are isolated from other similar sites, or which have been surveyed but were shown to be of fairly low diversity (although higher than most surrounding land) and isolated from other similar sites. The value of these sites is unknown in many cases, and their sensitivity may be changed after comprehensive survey.

Development within areas identified as low sensitivity may be possible although further investigation will be required to fully appreciate the significance of features and areas of landscape. Where features are not then identified as being of moderate or high sensitivity appropriate mitigation will be required to limit adverse impact.

8.5.8 Lowest Sensitivity

The remainder of the Core Study Area (subject to survey)

Please note that all decisions on site sensitivity have been made using the information currently available for each site. In some cases there is limited information available for PWS and therefore further investigations of these sites should be made prior to any development occurring in their vicinity.

8.5.9 **Biodiversity Sensitivity Assessment**

8.5.10 Study Area 1: Easton Neston

1 LWS Cappenham Bridge Drain

8.5.11 Study Area 2: Wood Burcote

1 LWS Wood Burcote

8.5.12 Study Area 3: Porterswood

1 LWS Wood Burcote
1 PWS Porterswood Farm

8.5.13 Study Area 4: Swinneyford

No area identified

8.5.14 Study Area 5: Greens Norton

1 LWS Greens Norton Disused Railway
1 PWS Greens Norton Disused Railway

8.5.15 Study Area 6: Caldecote

3 LWS (Tiffield Disused railway (South), Tiffield Lake and Tiffield Quarry)
2 PWS (Bairstows Lodge and Tiffield Road disused Pit.)
Protected Wildflower verges along the Towcester to Tiffield Road.

8.6 **Cultural Heritage Sensitivity Assessment Criteria**

8.6.1 The East Midlands Regional Plan emphasises the importance of ensuring change does not destroy the regions irreplaceable historic assets and distinctive character and that the need for change is informed by understanding, careful management and the involvement of local communities.

8.6.2 The sensitivity assessment of the cultural heritage elements recognises that historic assets and/or their settings are usually irreplaceable and have been assessed accordingly.

8.6.3 High Sensitivity

Internationally and nationally designated sites with statutory protection (i.e. Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields, Listed Buildings, and Conservation Areas) have been graded as high sensitivity.

8.6.4 Medium Sensitivity

This category includes locally significant non-statutorily designated archaeological sites such as Non-registered Parks and Gardens and Known Archaeological Assets, which have been identified as presenting significant constraints to development due to their extent, nature or state of preservation. These sites include rare monument types of national or regional importance identified on the Northamptonshire Historic Environment Record.

'The majority of ridge and furrow areas (a regionally-distinctive landscape type which is being diminished as a result of development and ploughing, but provides a visual and tangible link with the past) are initially considered to be of medium sensitivity. Further investigation would be required on a site-by-site basis'.

In some instances the exact nature of the resource may not be fully understood or documented, but is nevertheless identified as a significant constraint to development (refer to MAP 14). Some development within areas identified as medium sensitivity may be possible although further investigation will be required to fully evaluate the significance of the features and areas of cultural heritage remains. Where features are not identified as being of high sensitivity, appropriate mitigation will be required to limit adverse impact.

8.6.5 Low Sensitivity

This category includes cultural heritage sites which have been identified but which are (for example) in continuing use, such as historic road routes or railways, or where industrial remains are thought to be deeply buried. The value, extent and state of preservation of these sites is unknown in many cases and their sensitivity may be changed after comprehensive survey.

Development within areas identified as low sensitivity may be possible although further investigation will be required to fully appreciate the significance of features and areas of cultural heritage remains. Where features are not then identified as being of moderate or high sensitivity appropriate mitigation will be required to limit adverse impact.

8.6.6 Lowest Sensitivity

The remainder of the Core Study Area. Additional currently unknown archaeological remains may be present in these areas (for example masked by surviving medieval ridge and furrow remains which may preserve relict landscapes) and proposed development will need to be informed by schemes for appropriate archaeological assessments, redesign and mitigation where new cultural heritage assets are identified.

8.6.7 Please note that all decisions on site sensitivity have been made using the information currently available for each site. For some assets that are based upon records held on the Northamptonshire Historic Environment Record there is little supporting information and therefore further investigations of these sites should be made prior to any development occurring in their vicinity.

This report does not form an official statement of sensitivity by Northamptonshire County Council's Historic Environment Record.

8.6.8 **Cultural Heritage Sensitivity Assessment**

8.6.9 Study Area 1: Easton Neston

Conservation Areas at Hulcote, Easton Neston and part of Towcester town.
Registered Parks & Gardens at Easton Neston.
Ridge and Furrow within Easton Neston.
Scheduled Monument in Towcester town centre.

8.6.10 Study Area 2: Wood Burcote

Non Registered Park & Garden.

8.6.11 Study Area 3: Porterswood

No area identified.

8.6.12 Study Area 4: Swinneyford

No area identified.

8.6.13 Study Area 5: Greens Norton

No area identified.

8.6.14 Study Area 6: Caldecote

Conservation Area at Tiffield.

8.7 Conclusion: Combined Sensitivity

- 8.7.1 The following section assesses the sensitivity of the landscape within the study areas. In assessing the overall sensitivity levels of the landscape, judgements have been made based on the factual assets and elements of biodiversity and cultural heritage, combined with the assessment of the local landscape. This process identifies the hierarchy of elements in a landscape that give a locality its own unique sense of place.
- 8.7.2 An important aspect of the landscape character assessment process is that it is objective and importance has been given to identifying visual characteristics that are distinctive, rare or special. It takes individual judgement to reach conclusions regarding landscape quality, but in the case of this study it is of importance when put in the context of a large scale urban development and the impact that this will have on the existing landscape.
- 8.7.3 MAP 12 (QD42_200_12_Rev B) illustrates the combined sensitivity of the core study area. It is a graphic illustration of combined sensitivity using all the elements and assets shown on MAP 11. MAP 12 should be used as a strategic visual interpretation only and the following text should be the main focus of the combined sensitivity analysis. For example, in some study areas there will be localised elements of lower quality within the landscape, such as poor buildings or negative artefacts, these are identified by yellow tones. The information on MAP 11 has been used to inform the sensitivity conclusions in this section. It should be emphasised that whilst a designation of high sensitivity does not preclude development, any development in these areas would require full justification, strong mitigation and site-specific schemes to achieve the appropriate design and type of development in such locations.
- 8.7.4 The majority of the Core Study Area is considered to be of high/medium-high sensitivity. However, there are some areas outside of Towcester, which are of medium and low sensitivity. Some low sensitivity sites are bisected by areas of medium sensitivity (such as river corridors) and these issues would need to be resolved through scheme designs and addressed fully through Environmental Statements.

8.7.5 Area 1: Easton Neston

This area has a very **high** level of visual landscape sensitivity which is achieved by a combination of landscape and environmental elements. The high quality landscape character is created by a combination of undulating topography, small scale field patterns and the major element of the historic landscape and gardens at Easton Neston.

There is **high** cultural heritage sensitivity resulting from the historic gardens being a registered park and garden, areas of ridge and furrow pasture, the conservation area of Hulcote and the historic context of the racecourse.

Biodiversity sensitivity is **medium** and the area contains the Cappenham Bridge Drain Local Wildlife Site and the flood plain area associated with the River Tove.

8.7.6 Area 2: Wood Burcote

This area has a **high** landscape sensitivity, achieved by the introverted small scale landscape character created by the combination of small paddocks with hedgerow division and the high content of trees, hedgerows and woodland, combined with undulating topography, creating intimacy and enclosure. These elements aggregate to achieve a unique quality and landscape character to this area. Wood Burcote wood is administered by the Woodland Trust, who have identified long term management objectives, together with wildlife habitat improvements for the wood.

The area is of **medium** cultural heritage sensitivity and contains a non-registered park and garden.

The area is of **medium** biodiversity sensitivity and contains Wood Burcote local wildlife site, together with the range of habitats provided by the existing woodland, hedgerows and trees.

8.7.7 Area 3: Porterswood

The area is of **medium** landscape sensitivity as the area is located on higher contours and is exposed to distant views to the north and the south. There is a large open scale field pattern with limited hedges, limited woodland and trees within the area.

The cultural heritage sensitivity is **low** as there are no cultural heritage assets identified.

The biodiversity is of **medium** sensitivity, due to the identification of a potential wildlife site at Porterwood Farm.

8.7.8 Area 4: Swinneyford

This area is of **low- medium** visual landscape sensitivity, due to the open field pattern, with large field units, no significant woodland, hedgerows or trees, and is dissected by the A43 which is a significant detractor.

The cultural heritage is of **low** sensitivity due to the absence of any notable heritage elements.

The biodiversity is of **low** sensitivity, due to the absence of biodiversity assets.

8.7.9 Area 5: Greens Norton

This area is of **low- medium** visual landscape sensitivity due to the large open field pattern which provides a bland and open landscape character. The area has limited trees and hedgerows with no significant landscape quality or structure.

The cultural heritage sensitivity is **low** as there are no cultural heritage assets identified.

The biodiversity sensitivity is **medium** as the site contains the Greens Norton disused railway local wildlife site and a potential wildlife site at the eastern end of the dismantled railway.

8.7.10 Area 6: Caldecote

This area is of **medium- high** landscape sensitivity. The landscape is composed of small field patterns, creating a varied tapestry, together with elements of woodland and significant hedgerows with varied topography, rising to higher contours to the north and providing views to the south.

The cultural heritage is **low- medium** sensitivity, the area containing the conservation area of Tiffield.

The biodiversity is of **medium-high** sensitivity and contains three local wildlife sites associated with the disused railway line, which runs between Towcester and Tiffield (Tiffield disused railway, Tiffield Lake and Tiffield Quarry), two potential wildlife sites at Bairstows Lodge and Tiffield Road disused Pit. There are also protected wildflower verges along the Towcester to Tiffield road.

PART C: GREEN INFRASTRUCTURE STRATEGY

9.0 GREEN INFRASTRUCTURE

9.1 Introduction

9.1.1 This section of the study considers the criteria for the development of a Green Infrastructure Strategy appropriate for Towcester. This is achieved by the combination of the baseline and sensitivity analysis presented in parts A & B with the local scale characteristics and functionality. This will allow a more refined assessment and response to Green Infrastructure requirements and opportunities than is possible at a sub regional scale.

9.1.2 This section begins with an introduction to Green Infrastructure and then examines the Green Infrastructure requirements for Towcester. The findings are then brought together in a series of recommendations for the delivery of a Green Infrastructure Strategy.

9.1.3 This strategy will inform the Joint Core Strategy.

9.2 What is Green Infrastructure?

9.2.1 'Green infrastructure is a network of multi-functional green space, both new and existing, both rural and urban, which supports the natural, historical and ecological processes and is integral to the health and quality of life of sustainable communities'.

9.2.2 The Northamptonshire Strategic Green Infrastructure Assessment has adopted a strategic and collaborative approach that, through regeneration, conservation and land management, addresses the environmental, social and economic aspects of growth and development, changes within both urban and rural landscapes and the fragmentation of habitats.

9.2.3 The key principles of Green Infrastructure (as set out in the Green Infrastructure Guide for the East Midlands (EMGIN, 2008) are as follows:

- Contribute to the management, conservation and enhancement of the local landscape.
- Contribute to the protection, conservation and management of historic landscape, archaeological and built heritage assets.
- Maintain and enhance biodiversity to ensure that development and implementation results in a net gain of Biodiversity Action Plan habitats.
- Provide connectivity and avoid the fragmentation of habitats, sites and natural features, to increase the potential for natural regeneration and the migration of species of flora and fauna, which may be affected by changing climatic or other conditions.
- Be designed to facilitate sustainable longer-term management.
- Be delivered through enhancement of existing woodlands and also by the creation of new woodlands and forest areas.
- Create new recreational facilities particularly those that present opportunities to link urban and countryside areas.
- Take account of and integrate with natural processes and systems.
- Be managed and funded in urban areas to accommodate nature, wildlife and historic and cultural assets, and provide for sport and recreation.
- Be designed to high standards of quality and sustainability to deliver social and economic, as well as environmental benefits.
- Provide a focus for social inclusion, community development and lifelong learning.

9.2.4 At the strategic level, Green Infrastructure is an environmental system that supports the health, wellbeing and aesthetic values of communities and the maintenance of functional ecosystems. It provides an asset that enables the environment to support and maintain natural and ecological processes, and sustains land, air and water resources. It also:

- contributes to high quality and accessible landscapes benefiting people and wildlife;
- plays an essential role in maintaining and enhancing the health of the natural environment and its ability to provide a wealth of 'ecosystem services';
- increases ecological connectivity to overcome habitat fragmentation and increase the ability of the natural environment to adapt to climate change;
- creates attractive and accessible places for people to enjoy direct and regular contact with the natural environment;
- strengthens links between urban areas and their surrounding countryside
- combines with promotional campaigns, green infrastructure can support healthier lifestyles by providing green routes for walking and cycling, and green spaces for exercise and play
- green infrastructure supports the efficient management of water resources. A network of green spaces reduces the likelihood of flooding by allowing water to permeate through the ground;
- green infrastructure can also be designed to act as flood storage areas, holding large volumes of water in temporary ponds to protect built up areas from flooding;
- green infrastructure can also contribute to delivery of sustainable land management e.g. through Higher Level Stewardship (HLS) schemes;
- green infrastructure can also create a range of social and economic benefits, both directly (through employment in capital projects and future management) and indirectly (increased visitors and visitor spend).
- ensures the efficient use of land through a multifunctional approach to land use planning;
- supports functioning ecosystems and robust natural systems for the management of basic resources such as water, clean air, soil, and the maintenance of biodiversity;
- delivers a broad range of ecosystem services and linked social and economic benefits that clearly demonstrate the relevance of the natural environment to the lives and livelihoods of individuals and communities;
- makes a direct contribution to the climate changing 'proofing' of peoples' homes and communities;
- enhances the self sufficiency of communities though providing local food production and recreational areas.

9.3 Sustainable Biodiversity Network

9.3.1 Green Infrastructure Provision

9.3.2 The proposed Green Infrastructure Network for Towcester is shown on MAP 13 (QD42_100_13_ Rev B).

9.3.3 This drawing illustrates habitat opportunities and wildlife corridors, together with sustainable movement networks. It also shows an order of priority for green route development.

9.3.4 Proposed developments should incorporate opportunities for the delivery of biodiversity habitat links and enhancement, and the expansion of Current and Potential Wildlife Sites.

9.3.5 These opportunities include the establishment of habitats appropriate to the area. By combining the specific aims of habitat enhancement and connectivity, with other goals such as providing accessible natural green space, pedestrian links and landscape mitigation, it

will provide multi-functional landscapes and, as such, deliver the broader principles that are inherent in the Green Infrastructure concept.

9.3.6 This will provide a net gain in biodiversity and recreational opportunity whilst contributing to Northamptonshire's BAP targets.

9.4 Green Infrastructure Provision: Movement Network

9.4.1 Refer to MAP 13 (QD42_100_13 Rev B)

9.4.2 The provision of a sustainable movement network is an important aspect of Green Infrastructure. It will include provision for sustainable patterns for walking, cycling and horse riding, where appropriate. Towcester's Green Infrastructure Network will focus on the need to establish a structure of safe green routes. These will aim to link the environmental and, wherever possible, cultural and leisure assets.

9.4.3 The sustainable movement network contains two different elements. They are not intended to indicate rigid corridors for Green Infrastructure provision, but instead identify broad landscape zones within which Green Infrastructure-related proposals should be focussed.

9.4.4 The **Primary Network** is made up of strategic links between major settlements, key wildlife sites and recreational opportunities. The routes are composed of the Public Rights Of Way network and cycle routes, they also run through open countryside, disused railways and other environmental assets such as watercourses.

9.4.5 The **Secondary Network** links villages and hamlets together, and to assets in the wider countryside. It is composed of the Public Rights Of Way network and cycle routes. A network of local connectors has also been proposed for Towcester, which would link different parts of the town, and other parts of the sustainable movement network.

10.0 POLICY FRAMEWORK

10.1 Introduction

10.1.1 The provision of a comprehensive network of green infrastructure with multi-functional benefits is recognised at National, Regional and Local Levels. At a National level, (PPS1) – Delivering sustainable development (2005); supplement to PPS1 (2007) Planning and Climate Change; PPS12 – Local Spatial Planning; PPS7 – Sustainable Development in Rural Areas; PPS9 – Biodiversity and Geological Conservation; PPS25 – Planning and Flood Risk; and PPS22 – Renewable Energy. All these policies reflect and encourage the need to identify and incorporate Green Infrastructure.

10.1.2 The Supplement to PPS1: Planning and Climate Change (2007) recognises *the contribution to be made from existing and new opportunities for Open Space and Green Infrastructure to urban cooling, sustainable drainage systems and conserving and enhancing biodiversity*. Policy requirements within the Regional Spatial Strategy (RSS) are outlined below. The MKSM Sub-Regional Strategy sits within the RSS.

10.1.3 At a local level, while the West Northamptonshire Joint Planning Unit has yet to finalise the Joint Core Spatial Strategy and policy framework, the provision of Green Infrastructure is supported by CLG and policy in the RSS. On this basis the inclusion of Green Infrastructure networks should form an integral part of Towcester's infrastructure requirements for growth.

10.2 Regional Spatial Strategy for the East Midlands (RSS8)

10.2.1 The principle of delivering Green Infrastructure is now embedded within the adopted East Midlands Regional Plan (March 2009). The vehicle for this growth will be the MKSM Sub-Regional Strategy.

10.2.2 The policies in the East Midlands Regional Plan set the context for the preparation of the West Northamptonshire Local Development Framework and help in the development of related policy. Of direct relevance are the following policies:

10.2.3 Policy 1 Regional Core Objectives

To secure delivery of sustainable development within the East Midlands, all strategies, plans and programmes should meet the following core objectives:

- c) *To protect and enhance the environmental quality of urban and rural settlements to make them safe, attractive, clean and crime free places to live, work and invest in, through promoting:*
 - *“Green Infrastructure”*
 - *enhancement of the “urban fringe”.....*

- g) *To protect and enhance the environment through the:*
 - *protection, enhancement, sensitive use and management of the Region’s natural resources...*

- h) *To achieve a “step change” increase in the level of the Region’s biodiversity through:*
 - *The management and extension of habitats, both to secure net gains in biodiversity and to facilitate species migration to allow the biosphere to adapt to climate change, and*
 - *Ensuring that no net loss of priority habitats or species is allowed to occur.*

10.2.4 Policy 26: Protecting and enhancing the Region’s Natural and Cultural Heritage

10.2.5 Policy 27: Regional Policies for the Historic Environment

10.2.6 Policy 28: Regional Priorities for Environmental and Green Infrastructure

10.2.7 Policy 29 Priorities for enhancing the Region’s Biodiversity

10.2.8 Policy 30: Regional Priorities for Managing and Increasing Woodland Cover

10.2.9 Policy 40 Regional Priorities for Culture, Sport and Recreation

11.0 DELIVERY OF GREEN INFRASTRUCTURE

11.1 Introduction

11.1.1 So far this study has undertaken an analysis of data, which has resulted in a series of illustrations that identify valuable and quality assets. The baseline information for this section can be found on MAPS 9, 10, 11 & 12 (QD42_100_9-10-11-12_Rev B) :

Designated Nature Conservation, Biodiversity
 Cultural Heritage
 Strategic and Local Green Space
 Access and Movement

11.1.2 Green Infrastructure networks are illustrated on MAP 13 (QD42_100_13 RevB)

11.1.3 Existing open space resources.

The existing town of Towcester has limited open space provision, which is fragmented and limited in resources. There is an absence of coherent and linked open space, which creates a lack of connectivity and access. The principal areas of open space are located in Belle Baulk (adjacent to the River Tove), the Silverstone Brook corridor and a section of flood plain associated with the River Tove north of the old Towcester Road. Formal recreation facilities are provided at the Towcester Leisure Centre.

In order to address the shortfall in public open space the Green Infrastructure Strategy has endeavoured to provide additional open space offering a range of open space and recreational experiences, together with footpaths, cycle ways and connected wildlife corridors.

11.2 Establishment of key “ Green Infrastructure Routes”

11.2.1 The baseline information has been analysed and used to formulate the principles to develop a Green Infrastructure Strategy. These “Green Corridors” also contain the opportunity for Local Open Space sites and have a combined biodiversity and recreational function. The structure is illustrated on MAP 13 (QD42_100_13 Rev B)

11.2.1.1 The Green Infrastructure corridors are based on the environmental assets identified through the analysis of biodiversity, cultural heritage and landscape elements identified by the study.

11.2.1.2 Green Infrastructure benefits the community by providing a linked network of open space which will provide walking and cycling routes together with promoting healthy living and contributing to the climate change agenda.

11.2.1.3 The Green Infrastructure will provide a strong network of green corridors which will provide opportunities for wildlife habitat extension and connectivity.

11.2.1.4 The priorities for the implementation of the Green Infrastructure have been identified on MAP 13. The highest priorities are based on providing open space in areas of shortfall and population need, together with creating links between existing elements of open space.

11.2.2 The following Green Infrastructure routes and corridors have been identified using the analysis of assets and data:

1. River Tove - Primary Greenway

This route would provide access along the River Tove corridor, by utilising sections of local space within Towcester such as Belle Baulk and The Motte. The route would extend south and west of Towcester, providing connections to the Grand Union canal. The route to the west would utilise the river corridor, together with the dismantled railway line and existing public Rights of Way. This will provide connections to Abthorpe and Slapton and the opportunity to extend the route through to Banbury.

This corridor is likely to contain lowland meadow and neutral grassland with potential for other grassland types, wetland and riverine habitats, and woodland/scrub along the disused railway. There is potential for improvement to the habitats both in the

river and on the river banks, including restoration of grassland habitats and management of scrub and hedges

2. Towcester Inner Circle - Secondary Greenway

In order to provide additional local open space to support the existing Towcester community, it is recommended that an inner circle of open space is developed to link the existing fragments of open space at Belle Baulk, east of Towcester Road and Silverstone Brook. This route will provide connections to all the above-proposed Greenways. The western section of this route is part of the Grafton and Knightley Way Long Distance Footpath.

3. Towcester Circular - Secondary Greenway

This would provide a local circular route connecting existing elements of open space within Towcester and create connections to Tiffield and Greens Norton. The route is based principally on existing public Rights of Way, which could be enhanced. This route would provide a varied and contrasting experience in visual character and biodiversity content, with the formality of Easton Neston, the higher contours of Tiffield, the traditional Northamptonshire countryside between Tiffield and Greens Norton, the open character of the River Tove valley and the intimate high quality landscape of Wood Burcote. In addition, this route would create links with the other proposed greenways and provide connected footpath and cycleway opportunities.

4. Towcester to Gayton - Midshires Way - Grand Union Canal - Primary Greenway

The route is based on the disused railway line and provides a significant environmental route with varied biodiversity habitats. This route will also provide connections to national footpath routes, the Grand Union Canal and the potential to connect with the town of Northampton.

This corridor is largely formed along the Tiffield Disused Railway (South), which was recognised as a Local Wildlife Site for its neutral grassland plants. The railway line has gradually been covered with scrub vegetation, at the expense of the grassland flowers. Although the scrub is valuable for birds there is great potential for management to remove some scrub and restore the grassland to its former interest.

5. Towcester - Bugbrooke - Secondary Greenway

A local greenway, using existing public Rights of Way, to provide open space and recreational routes with connections to Caldecote, Ascote and Bugbrooke.

6. Towcester - Greens Norton - Litchborough - Primary Greenway

This greenway is based on the existing Knightley Way and could incorporate a cycleway to provide a sustainable movement connection to the facilities of Towcester. This would provide additional open space for the benefit of the community of Greens Norton and extend the existing Belle Baulk Park in Towcester.

7. Towcester - Silverstone - Secondary Greenway

This route is based on existing public Rights of Way and is within the sub-regional green infrastructure corridors (Yardley, Salcey and Wittlewood wooded ridge), as highlighted by the Northamptonshire Green Infrastructure Study.

8. Silverstone Brook - Secondary Greenway

This greenway follows the Silverstone Brook corridor, providing a positive recreation and cycleway corridor to Silverstone and connecting with the existing Silverstone Brook open space within West Towcester. This route could also provide the opportunity to make up the existing shortfall in recreational open space for sports and leisure facilities by using the more level contours associated with the brook corridor. This route has the added benefit of direct connection to the existing Towcester Leisure Centre. This corridor provides scope for restoration and creation of lowland meadows and wetland habitats to complement the habitat of the Silverstone Brook. Water voles have been recorded on the brook in the past, so management targeted at protecting this species will be beneficial.

9. Towcester - Whittlebury - Paulerspury - Secondary Greenway

This route is based on existing Public Rights of Way, which could be enhanced to accommodate cycle ways and additional wildlife habitat. This route would also offer a sustainable movement connection to the facilities of Towcester. The route follows part of the Grafton Way Long Distance Footpath.

11.3 Potential Improvements to Open Space Provision

11.3.1 It is inherent that many routes are both habitat links and access routes. These occur along river valleys (River Tove and Silverstone Brook) but also along woodland habitat links (Wood Burcote). Sensitive design and minor modifications of routes (e.g. keeping continuous verges) can enable improvements in terms of both access and biodiversity. There is also the potential to increase the educational value of these areas, and also areas of archaeological and/ or cultural interest through interpretation, guided walks etc.

11.3.2 Many of the opportunities to deliver improved or extended green infrastructure will lie not with the local planning authority but with other partners. For example, providing cycle routes within green links could help to meet objectives within a Local Transport Strategy for more sustainable travel and objectives within a local health strategy to increase the amount of exercise taken by local people. This further highlights the importance of ensuring that green infrastructure objectives are embedded in the Sustainable Community Strategies as well as in the Local Development Framework. Other funding stream is as described in 11:6:1 and can be promoted to provide money for improvements.

11.3.3 Improved signage and way-marking

In order to raise public awareness of the Green Infrastructure Network, it's marketing and branding needs to be positively improved. This can be achieved through consistent and themed signage and interpretation. If the network is not clearly communicated then it will not be used to its full potential. Other sources (e.g. EA, SNC & NCC) would consider the branding and marketing of the Green Infrastructure network within their own watercourse signage.

11.3.4 Maintaining the Quality and Accessibility of existing Green Space

It is important that the quality and accessibility of existing Green Space remains high, to ensure continuing levels of usage, and to avoid people being deterred from using the sites. Where there are accessibility issues the Green Infrastructure network should be examined to see if it could increase the level of accessibility.

11.3.5 Maximising the Biodiversity of Existing Open Spaces

The types of corridors shown on MAP 13 (QD42_100_13 Rev B) include grassland, woodland and water/lowland meadow. These sites should be managed to maximise the biodiversity value of each site, and of the network of sites as a whole. This linkage can be increased through the provision of additional green corridors between open space sites, which would provide both access and habitat connections

11.4 Additional Enhancement of Biodiversity

11.4.1 Identifying Sites for Future Conservation Programmes

Several of the “gaps” or breaks in the green infrastructure routes illustrated could be addressed through future conservation and habitat creation programmes, which also provide public access. For example, woodland/copse planting, riverbank clean-up, grassland restoration etc.

11.4.2 Management of Existing Biodiversity Resources

Existing sites that have been recognised for their biodiversity value (Local Wildlife Sites, SSSIs etc) are not necessarily under positive conservation management or in good condition. Lack of appropriate management on these sites may lead to a decline in biodiversity. Positive conservation management should be implemented in order to retain the features of biodiversity value. Once the long term future of these sites is secured, action should be taken to extend them and link them together with areas of suitable habitat.

11.4.3 Mitigation Planting

Carefully-sited Community Woodland schemes which are in keeping with the landscape and biodiversity characteristics of the area could improve woodland habitat corridors while at the same time softening the skyline. Similarly, increasing wet woodland in the Tove Valley would simultaneously enhance biodiversity. However, it should be noted that tree planting is not necessarily the most appropriate form of mitigation for all types of development.

11.5 The Role of Structural Landscape Areas

11.5.1 Green Infrastructure enhancement can also be achieved through the careful design of development sites. The provision of structural landscape areas (usually achieved through the planting of trees/woodland and shrubs) which enhance the landscape infrastructure will be required as part of all major new developments. These structural landscape areas will help to mitigate adverse visual impact, strengthen local character and identity and integrate new development into its wider landscape setting. The detailed assessment of development proposals may also necessitate off-site planting within the wider landscape. Site specific assessment of landscape and visual issues would be required to ascertain the nature of off-site mitigation proposals, paying particular regard to appropriateness to local character and other visual considerations.

11.5.2 The detailed assessment of development proposals may also necessitate off-site planting or habitat creation within the wider landscape. Site specific assessment of landscape, habitat types and visual issues would be required to ascertain the nature of off-site mitigation

proposals, paying particular regard to appropriateness to local character and other visual considerations.

11.5.3 A co-ordinated approach to the planning and design of structural landscape areas will contribute to local delivery of Green Infrastructure. Consistent with the principle of multi-functionality of green infrastructure provision, structural landscape areas have the potential to accommodate a wide range of functions and compatible uses. These potentially rich and diverse areas with a high level of accessibility to local people would contribute to the wider network of Green Infrastructure across and beyond the town. Examples of Green Infrastructure provision achieved through structural landscape include:

- Incorporation of a range of open space uses, including informal play areas and playing fields, and allotment areas;
- Biodiversity enhancement including strengthening and creation of new woodland, wetland and grassland and habitat links, or accommodation of more specific features such as a nature reserve;
- Sustainable water management;
- Sustainable movement network incorporating footpath, cycle ways and bridleways.

11.6 Principles for Delivery

11.6.1 The delivery of Green Infrastructure is an overarching process which requires the understanding and input of all the stakeholders. The lead local authority officer should actively engage with the local strategic partnership to ensure the significance of Green Infrastructure is understood and inclusive in the spatial planning process.

11.6.2 The delivery of Green Infrastructure can be progressed through the following process:

- Local area agreements to develop Green Infrastructure targets.
- Local transport strategy for sustainable travel and health and wellbeing.
- Planning conditions requiring the creation of open space and wildlife habitats as part of development mitigation.
- Planning obligations (section 106 agreements) for funding of open space and habitat provision and management of both new and existing.
- Planning conditions and obligations requiring the protection and enhancement of existing cultural assets.
- Working with the Northamptonshire Biodiversity Partnership to provide management advice and assistance to landowners.
- Promotion of conservation land management schemes such as Higher Level Stewardship and Woodland Grant Schemes to deliver habitat management and enhancements in GI corridors and surrounding land.
- Tariff; a roof tax to support Green Infrastructure.
- Community Infrastructure levy; charges levied by local authorities using a formulae on the size of development.
- Regional Infrastructure fund to support key infrastructure for developments within a growth point.
- Growth point funding; funding support in named growth point areas through the housing growth fund.
- Private management charges; private funding for on going maintenance of public accessed open space which remains in private ownership.
- Voluntary sector; labour and expertise from 'not for profit' organisations. Partnerships can be formed between Green Infrastructure stakeholders to access funding and promotional activities.

11.6.3 A number of principles for the delivery of Towcester specific Green Infrastructure projects have been identified through this study. These are set out below, and are compatible with the more general principles of Green Infrastructure set out in section 9.

- 1) Projects which contribute to key Green Infrastructure routes and complete/improve/enhance the Primary Movement Network and their associated Biodiversity Networks along river valleys and woodlands should be supported.
- 2) Projects which increase the safety of users of the Movement Network when walking on roads (and at the same time potentially improve the grassland corridors along verges) should be supported.

11.6.4 It should be noted that Green Infrastructure objectives can be achieved through a number of means. For example, the management of Open Space sites within Habitat Reserves/Habitat Corridors to improve their biodiversity could in some cases be addressed through changes in Council or landowner's management/maintenance regime. Such changes (e.g. in mowing regimes) would not necessarily have a financial implication.

11.6.5 New development also has the opportunity to make a major contribution to Green Infrastructure through its design and structure planting on site, and/or through compensatory measures off site.

12.0 CONCLUSIONS

- 12.1.1 Green Infrastructure is enshrined in National, Regional and Local Planning Policies. These include PPS 1 Climate Change Supplement; RSS8 (the *Regional Spatial Strategy* for the East Midlands).
- 12.1.2 The requirements outlined in this study can be integrated with the baseline analysis and landscape sensitivity research to inform a Green Infrastructure Strategy for Towcester. The recommendations of the Green Infrastructure Strategy include initiatives to improve the Sustainable Movement Network and the Open Space Network, and also to enhance biodiversity. These initiatives include creating a Sustainable Movement Network, filling missing sections and providing additional links, improving the accessibility of open spaces and maximising their biodiversity.
- 12.1.3 By undertaking the Green Infrastructure Strategy in conjunction with a landscape sensitivity study, it is possible to make a practical and positive contribution to the delivery of sustainable development in and around Towcester.
- 12.1.4 Green Infrastructure makes an extremely valuable contribution to meeting Towcester's infrastructure requirements in terms of open space, sport and recreation, and also contributes more broadly to its environment, biodiversity and accessibility. Towcester has great potential to further improve and enhance its existing limited Green Infrastructure provision in terms of Movement Networks, Open Space and Biodiversity Networks, and this Strategy should enable this potential to be achieved.

APPENDIX 1: LIST OF DATASETS

The schedule below presents a summary of data presented on the Baseline Review Drawings.

- 1:50,000 Ordnance Survey map
- Aerial Photograph
- Ordnance Survey Landform Profile
- Ordnance Survey Master map
- River Channel/ Major Watercourses
- Flood Zones
- Sites of Special Scientific Interest (SSSI)
- Local Wildlife Sites (LWS)
- Potential Wildlife Sites (PWS)
- Pocket Park
- Ancient Woodland
- Registered Parks and Gardens
- Scheduled Monuments
- Conservation Areas
- Ridge and Furrow
- Roman Road
- Non Registered Parks and Gardens
- Known Archaeological Assets (derived from Historic Environment Record)
- Woodland with Public Access/ Recreation Role
- Parks or Green spaces
- Byways
- Bridleways
- Footpaths
- Transport Infrastructure (Motorways, A Roads, B Roads, Minor Roads).
- Strategic Agricultural Land Classification
- Local Agricultural Land Classification.

APPENDIX 2: GLOSSARY OF TECHNICAL TERMS AND ACRONYMS

AONB Area of Outstanding Natural Beauty
ASL above sea level
BAP Biodiversity Action Plan
BCA Biodiversity Character Assessment
CIC Community Interest Company
CLCA Current Landscape Character Assessment
CLG (Department of) Communities and Local Government
CS Countryside Stewardship
EA Environment Agency
ECA Environmental Character Area
GI Green Infrastructure
HLCA Historic Landscape Character Assessment
LSGI Landscape Sensitivity and Green Infrastructure
LWS Local Wildlife Site (formerly known as County Wildlife Site)
MKSM Milton Keynes South Midlands (Regional Growth Area)
NCC Northamptonshire County Council
PWS Potential Wildlife Site
RNRP River Nene Regional Park
RSS Regional Spatial Strategy
SM Scheduled Monument
SNC South Northants Council
SRS Sub Regional Strategy
SSSI Site of Special Scientific Interest
WNJPU West Northamptonshire Joint Planning Unit

Biodiversity Character Area Defined by a suite of common characteristics, such as the range of habitat types, geology, soils, topography and watercourses and flood zones, which together typify a particular ecological landscape in Northamptonshire. Each Biodiversity Character Type is subdivided into Biodiversity Character Areas. These are geographically discrete areas that contain the suite of common characteristic ecological features that characterise a particular Biodiversity character type. Biodiversity Character Area boundaries are defined by changes in underlying geology, the extent of particular soil types, particular contours or landscape features such as rivers or the edges of plateau landscapes.

Biodiversity Network A means of connecting fragmented habitats in order to assist species persistence and habitat function.

Countryside Connectors Part of the Sustainable Movement Network, they link towns, villages and hamlets and to assets in the wider countryside. They are composed of the Public Rights of Way network and cycle routes.

Green Infrastructure A planned network of multifunctional Green Spaces and interconnecting links.

Habitat corridor Where existing **habitat reservoirs** of the same or similar Biodiversity Action Plan habitats form a distinct network through the landscape.

Habitat network Linked habitat sites, including **habitat corridors** and **habitat reservoirs**.

Habitat reservoir An existing site, which provides a habitat for species to live, e.g. a woodland; an area of grassland.

Hinterland The land surrounding a settlement, which is connected to it visually or in terms of its function.

Historic Landscape Character Types/ Areas Distinct types of landscapes that are relatively homogenous in historic character. They are generic in nature in that they may occur in different parts of the county...but wherever they occur they share broadly similar combinations of historical land use and settlement pattern. Historic Landscape Character Areas are unique in that they are geographically discrete, sharing characteristics of the broader Historic Landscape Types to which they belong.

Inter-Urban Neighbourhood Connectors This local level of the **Sustainable Movement Network** link different areas of Towcester.

Landscape character area The unique individual geographical areas in which **landscape types** occur. They share generic characteristics with other areas of the same type but also have their own particular identity.

Landscape character type Generic types of landscape, which possess broadly similar patterns of geology, landform, soils, vegetation, land use, settlement and field pattern in every area where they occur.

Landscape Sensitivity (to a specific type of change) The extent to which a landscape can accept change of a particular type and scale without unacceptable adverse effects on its character.

Outcrop An area of rock on the surface of the Earth. An outcrop is usually material that can be seen, but the name may also be used where the rock is covered.

Primary Network Strategic routes within the **Sustainable Movement Network**. They are composed of strategic links between major settlements, using the Public Rights of Way network and cycle routes. Green Ways are through open countryside while Blue Ways follow water courses including rivers, navigations and canals.

Setting The area of landscape around a settlement, which forms the approach to the settlement, and/or the backdrop to views from within it.

Strategic Gap The gap between two settlements, which enables them to remain discrete from each other.

Strategic Infrastructure Framework An interconnected network of Sub Regional and local Green Infrastructure corridors.

Sustainable Movement Network Principal networks and opportunities for sustainable people movement from centres of settlement to the countryside.

Sustrans UK-based charity dedicated to sustainable transport. Co-ordinates the National Cycle Network.

Townscape character type Generic types of townscape, which contain similar street patterns and age/ style of buildings in each area where they occur.

Visual influence Extent of potential visibility to or from a specific area or feature.

West Northamptonshire Development Corporation Established by the Government in 2004, the WNDC mission is to promote and deliver sustainable housing growth and regeneration in Towcester, Daventry and Towcester.

West Northamptonshire Joint Planning Unit Daventry District, Towcester Borough, South Northamptonshire Council and Northamptonshire County Councils have established the West Northamptonshire Joint Planning Unit (JPU) to prepare the Joint Development Plan Documents, including the Joint Core Strategy and the Joint Supplementary Planning Documents. Each Borough and District Council continues to be responsible for preparing its own Local Development Documents addressing local matters although co-ordination of the overall programme by the JPU will be necessary.

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