Appendix U:
Developing a Green Wheel around Horncastle

Horncastle

Green Infrastructure Study: How to Create a Green Wheel for Horncastle

September 2014

BRCC

Horncastle

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Contents

Introduction

The Horncastle Neighbourhood Development Plan Steering Group, on behalf of Horncastle Town Council have commissioned BRCC to undertake local Green Infrastructure (GI) Planning work.

This GI Study is intended to guide the Horncastle Neighbourhood Development Plan and embed GI provision within the development of the town, making it a desirable place to live, work and visit.

Neighbourhood Plan Context

The Draft Horncastle Neighbourhood Development Plan has as its vision:

The Horncastle Neighbourhood Development Plan will take a positive approach to development so long as it brings forward a balance of housing, employment, retail, community and leisure development to ensure Horncastle remains an attractive, vibrant place, providing all the amenities you would expect in a desirable town. All development over the Plan period will maximise the environmental assets in and around Horncastle, improving access to the countryside and open spaces for residents and visitors.

This vision has been prepared and endorsed by the community and should be seen as complying with paragraph 69 of the NPPF.

To preserve the essential character of Horncastle by ensuring that:

i) all new development enhances the quality of life in the town whilst achieving integration into the existing community
ii) there is a balance between housing growth and the provision of community facilities for the benefit of all residents
iii) the rural nature of its setting and its open spaces are preserved and enhanced
iv) opportunities are maximised to support local businesses

This GI Study should be used to influence the development of objectives and policies in the Horncastle Neighbourhood Development Plan.

At a District level, this report also links to the East Lindsey District Council Green Infrastructure Audit, 2012 which defines GI as:

"… the umbrella term used to describe all the different elements that form the network of natural and semi-natural spaces within and around our towns and villages, and in the open countryside…

…GI covers a variety of types of spaces, including (but by no means exclusively) woodland, parks and gardens, green lanes, public rights of way, churchyards, sports facilities, water courses and beaches and dunes."

This definition is narrower than others, focussing primarily on ‘spaces’ and their ‘linkages’. The author of this report uses a definition which bases GI on the 5 overlapping themes of:

- Open Space
- Access
- Biodiversity
- Historic Environment
- Landscape

These themes are identified within the definition of GI approved by the Natural England Board:
“A strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features, designed and managed as a multi-functional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design and management should also respect and enhance the character and distinctiveness of an area with regards to habitats and landscape types.”

Examples of GI assets include:

- Accessible Countryside
- Urban parks
- Canals and Water space
- Pocket Parks
- River Meadows
- Footpaths
- Bridleways
- Cycleways
- Playing Fields
- Nature Reserves
- Woodlands
- Historic Sites
- Cemeteries

Existing GI Provision

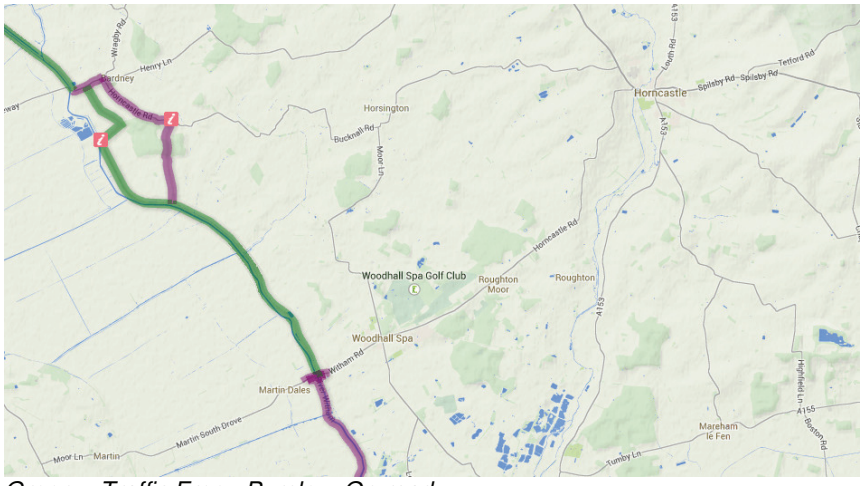
To inform the production of this report, site visits were undertaken by BRCC in July 2014. These visits enabled the identification of existing and potential GI assets and how these could be linked to create a coherent GI 'network'. The creation of this network over the coming years, in parallel with further anticipated housing development, will result in Horncastle becoming a thriving community, served by and caring for its local environment.

ACCESS

The main existing GI assets for access are focused on the disused canal and railway to the south of the town.

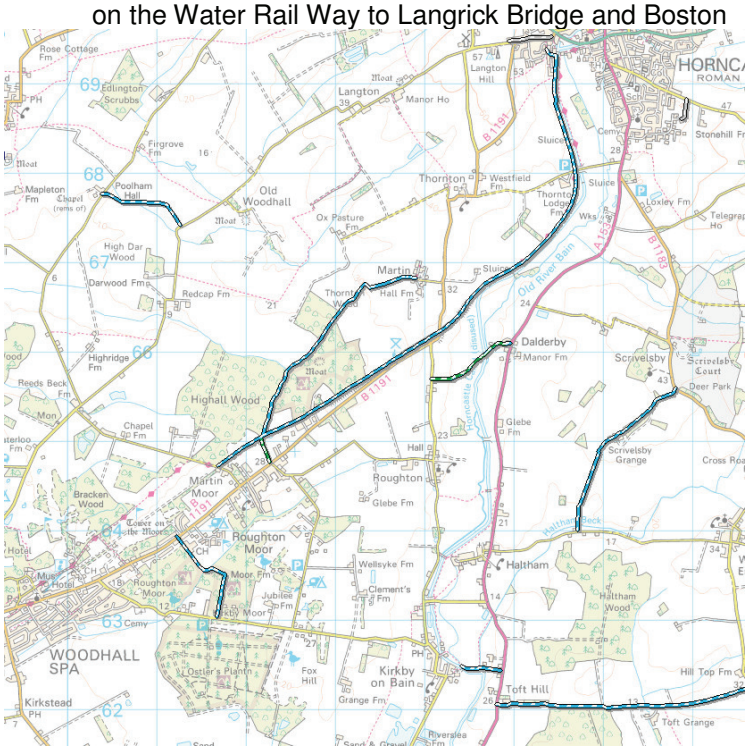
- A Public Footpath carrying the the Viking Way follows the eastern side of the Horncastle Canal / River Bain to Thornton Lodge. The Viking Way continues south of Thornton Lodge, sharing the disused Horncastle Railway on the west of the canal with the Spa Trail. The Viking Way also continues to the north east of Horncastle.
- A Public Bridleway follows the line of the disused Horncastle Railway from Horncastle, past Thornton Lodge, towards Woodhall Spa. The bridleway carries the local 'Spa Trail', and south of Thornton Lodge, also and the longer distance Viking Way.

- Route 1 of the National Cycle Network passes near to Horncastle at Woodhall Spa. Route 1 is a long distance cycle route (1,695miles) connecting Dover and the Shetland Islands, mainly via the east coast of England and Scotland that also forms the majority of the British section of the North Sea Cycle Route.



Green = Traffic Free; Purple = On-road

- The Water Rail Way is the local section of Route 1, travelling from Lincoln and passing Washingborough, Bardney and Southrey on the way to Kirkstead Bridge. Here, you can take roads into the village of Woodhall Spa or continue on the Water Rail Way to Langrick Bridge and Boston

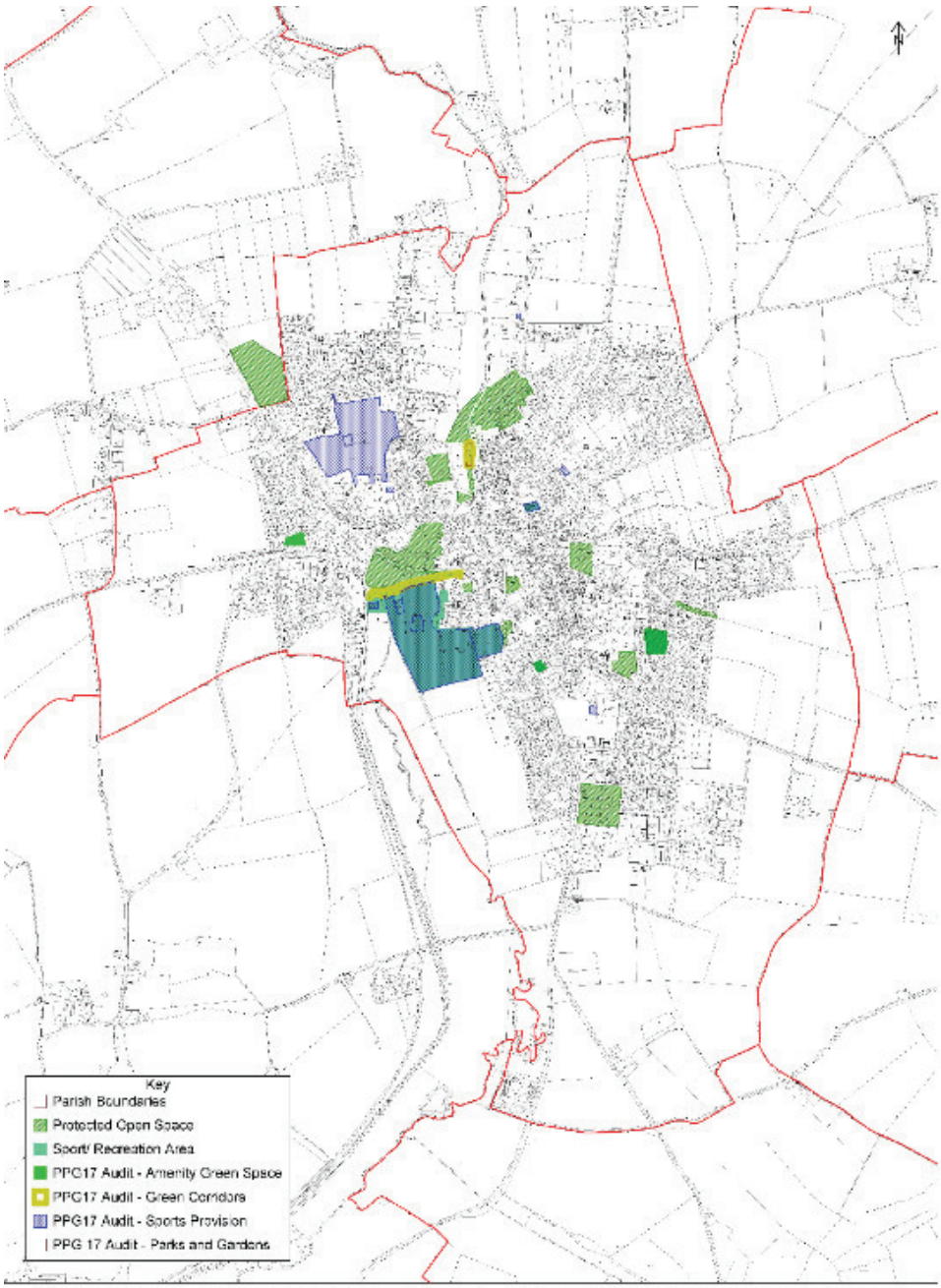


GREEN SPACE

The main existing GI assets for green space are:

- Areas of sports provision, the largest being a complex of pitches off The Wong, including the home ground of Horncastle Town FC
- Protected Open Spaces at Accommodation Road / A158; Bain Valley Park; and the confluence the River Waring, Old River Bain and River Bain/ Horncastle Canal.
- Woodland areas of Horncastle Community Woodland and Banovallum Carr, an 8.5hectare Woodland Trust site

The map below shows many, although not all of the above green spaces. It shows that these areas are in the western and central areas of the town, with the east being poorly catered for. Given that the ELDC GI Audit (2012) identifies a deficit of green space for the town as a whole, special effort should be made to allocated additional space(s) to the east. The GI audit further states that the deficit should be made at a community level through any growth in the town.
It should also be noted that the larger green spaces identified in the audit are not especially close or well linked to Horncastle and are therefore only really accessible by car; and as such do not meet the needs of the community as a whole.



Horncastle - Protected Green Spaces, Sports Recreation Area & PPG17

Scale 1:13000

East Lindsey District Council Green Infrastructure Audit, 2012
Horncastle has a total of 39.464ha of green space, although not all are large enough to meet NE size thresholds, with footpaths adding a further 3.712ha.
However, these sites only cover 73% of the town with gaps being mainly on the eastern side. There is still progress to be made at a community level through any growth in the town. At a local level, there is a site large enough to meet the local standard, Ashby Park, but this has not formal public access except for those using the facilities of the park i.e. public footpaths. Medium level is provided by Highall Wood at Woodhall Spa. There a number of other smaller sites within 5km (4.5 – 38.5ha), although only one of these (Forestry Commission land at Woodhall Spa - 38.5ha) is accessible. There is no provision at a strategic level in this part of the district.

Accessible Natural Greenspace Standard in Nature Nearby
Natural England, 2010
ANGSt aims to address this by setting a range of accessibility standards for natural sites and areas within easy reach of people's homes.

ANGSt

ANGSt recommends that everyone, wherever they live, should have an accessible natural greenspace:

- of at least 2 hectares in size, no more than 300 metres (5 minutes walk) from home;
- at least one accessible 20 hectare site within two kilometres of home;
- one accessible 100 hectare site within five kilometres of home; and
- one accessible 500 hectare site within ten kilometres of home; plus
- a minimum of one hectare of statutory Local Nature Reserves per thousand population.

BIODIVERSITY
The main GI assets for Biodiversity are:

- A Local Wildlife Site (LWS) – 'Horncastle Canal Grassland'
- Banovallum Carr – a Woodland Trust wet-woodland nature reserve; and
- Six of Sites of nature Conservation Interest:

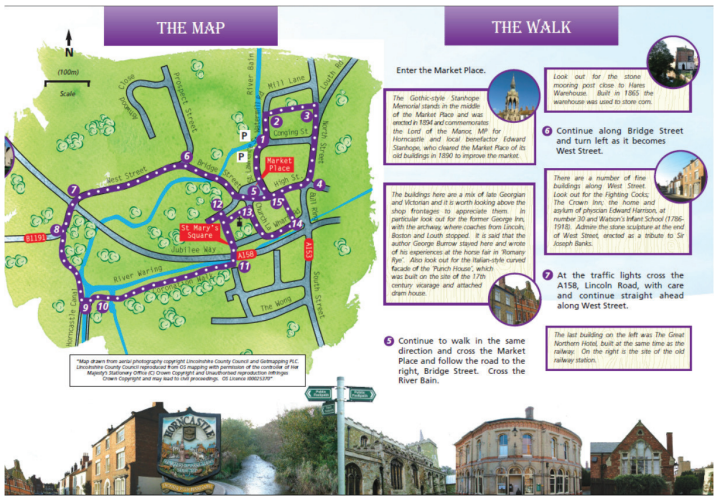
Sites of Nature Conservation Interest (SNCIs)
The LWSs status supersedes that of Sites of Nature Conservation Importance (SNCIs), which were identified on the basis of local knowledge and were selected without consideration of any formal criteria. In Greater Lincolnshire, the GLNP aims to assess all existing SNCIs using the criteria outlined in LWS guidelines. To avoid confusion,until sites have been assessed against formal criteria they retain their SNCI status.

TYPE	STATUS	CODE	NAME
SNCI	Notified SNCI	3417	Bowl Alley Lane Paddock
SNCI	Notified SNCI	3418	Bowl Alley Lane, Horncastle
SNCI	Notified SNCI	3743	Manor Farm, Low Toynton
SNCI	Notified SNCI	3808	Old River Bain Grassland
SNCI	Notified SNCI	3860	River Bain, Shearman's Wath Bridge to Horncastle
SNCI	Notified SNCI	4002	Thornton Lodge to Horncastle Dismantled Railway

HERITAGE

The main GI assets for heritage are closely aligned to those for access – namely the Horncastle Canal, Railway and the River Bain.

The Horncastle History and Heritage Society seeks to preserve local heritage and promote civic pride and to help achieve this has produced a Town Walk leaflet. The heritage features identified within this should be further celebrated through the routes and interpretation of a GI network.



http://www.horncastlecivic.org.uk/horncastle_today/town_walks/index.php

LANDSCAPE

Landscape, the 5th thematic component of GI is in essence the product of the other themes when viewed as whole. Although 2 miles outside of the Lincolnshire Wolds AONB boundary, Horncastle as a 'Gateway to the Wolds', with its landscape providing an attractive backdrop to the town.

The topography of the area is striking: sitting in a river valley at the confluence of the rivers Bain and Waring the morphology of the town shows the influence of these natural conditions on its structure. The land rises to the north and east (towards the Wolds) and the west.

Within the Landscape Character Appraisal 2009, Horncastle falls within E1 – Wragby to Horsington Vale Woodland and Farmland. The landscape's sensitivity is considered to be moderate to high due to the intact rural nature of the area.

Concept of a 'Horncastle Green Wheel'

The 'Horncastle Green Wheel' is a concept for the long term linking of publicly accessible green spaces and routes around the town to create an attractive network of GI assets which are rich in biodiversity, heritage and landscape value. The outer wheel will be served by a network of routes leading from the community, to the 'rim'; and where appropriate to the wider countryside beyond.

Fig 1 shows the main routes and other GI components forming the proposed Green Wheel and GI network.

The Wheel is considered 'green' due to both the natural and historic environment components forming it; and the promotion of recreational trips using healthy, non-motorised forms of sustainable 'transport'.

The Wheel will circle the town, creating a continuous accessible corridor. Ultimately it should be freely available to walkers and cyclists, while also providing appropriate routes for horse riders. The Wheel should cater for users of limited mobility, providing easy access to the GI network through appropriately surfaced paths and designed structures. Green spaces and associated features forming the Green Wheel may both be trip destinations in their own right; or may be corridors to other attractions further afield.

Although primarily delivering enhanced public access, the Green Wheel should also protect, manage, enhance, and promote other Green Infrastructure thematic assets, including biodiversity, landscape and heritage. Where possible, new habitats, landscape features and accessible green spaces should be created to link and extend the existing features to add to the network and contribute to such a Green Wheel.

Horncastle will see major changes in the coming years as existing and potential allocated sites come forward for development. Although some of this development may have an adverse impact upon existing GI features, there is great potential for the creation of new and embedding of other existing GI assets into these developments. These developments should contribute towards the delivery of this GI Plan / Green Wheel, through financial contributions via S106 and/ or CIL; and also through incorporating GI corridors and features within the development areas.

Fig 1 shows the main routes forming the proposed Horncastle Green Wheel

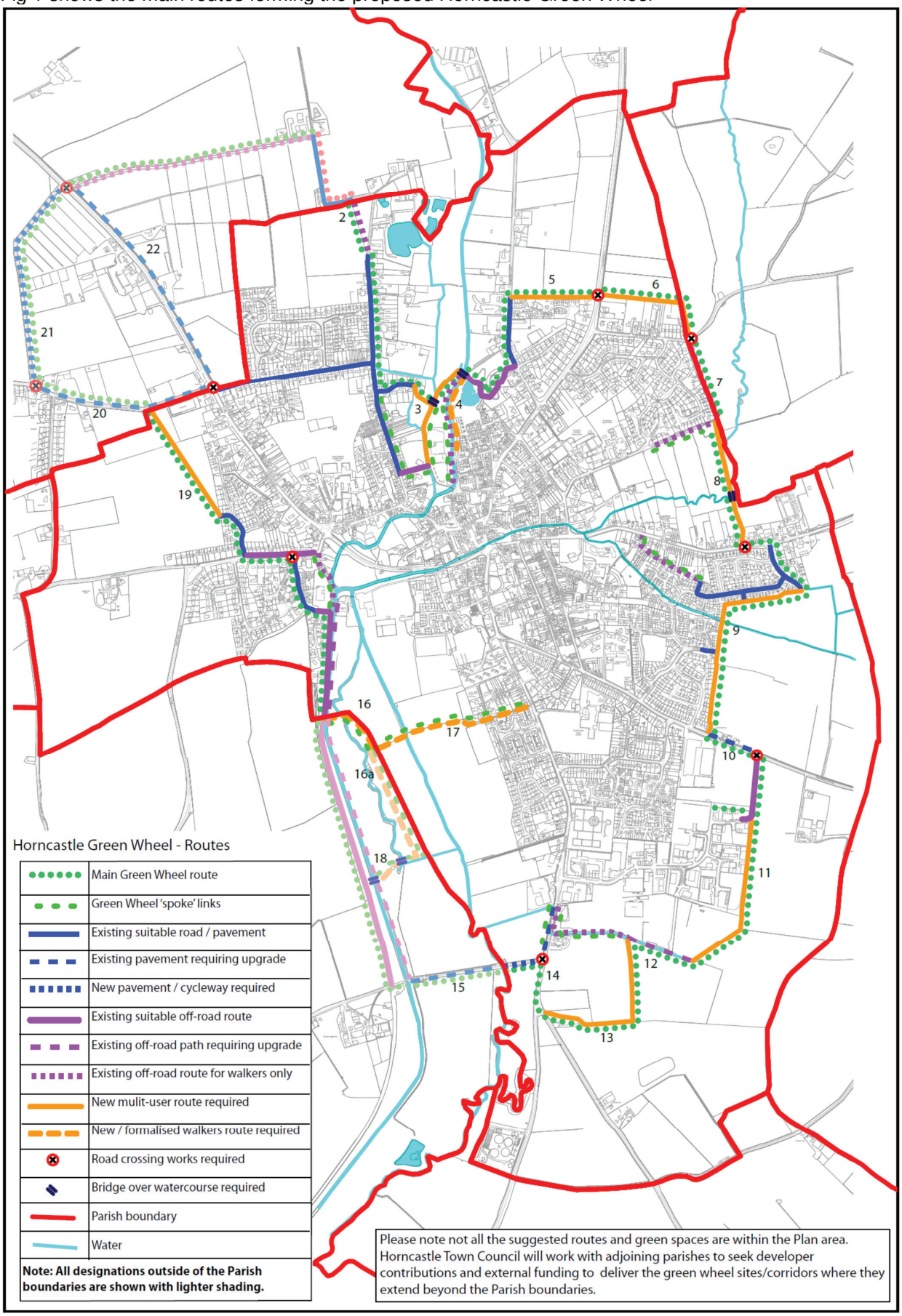
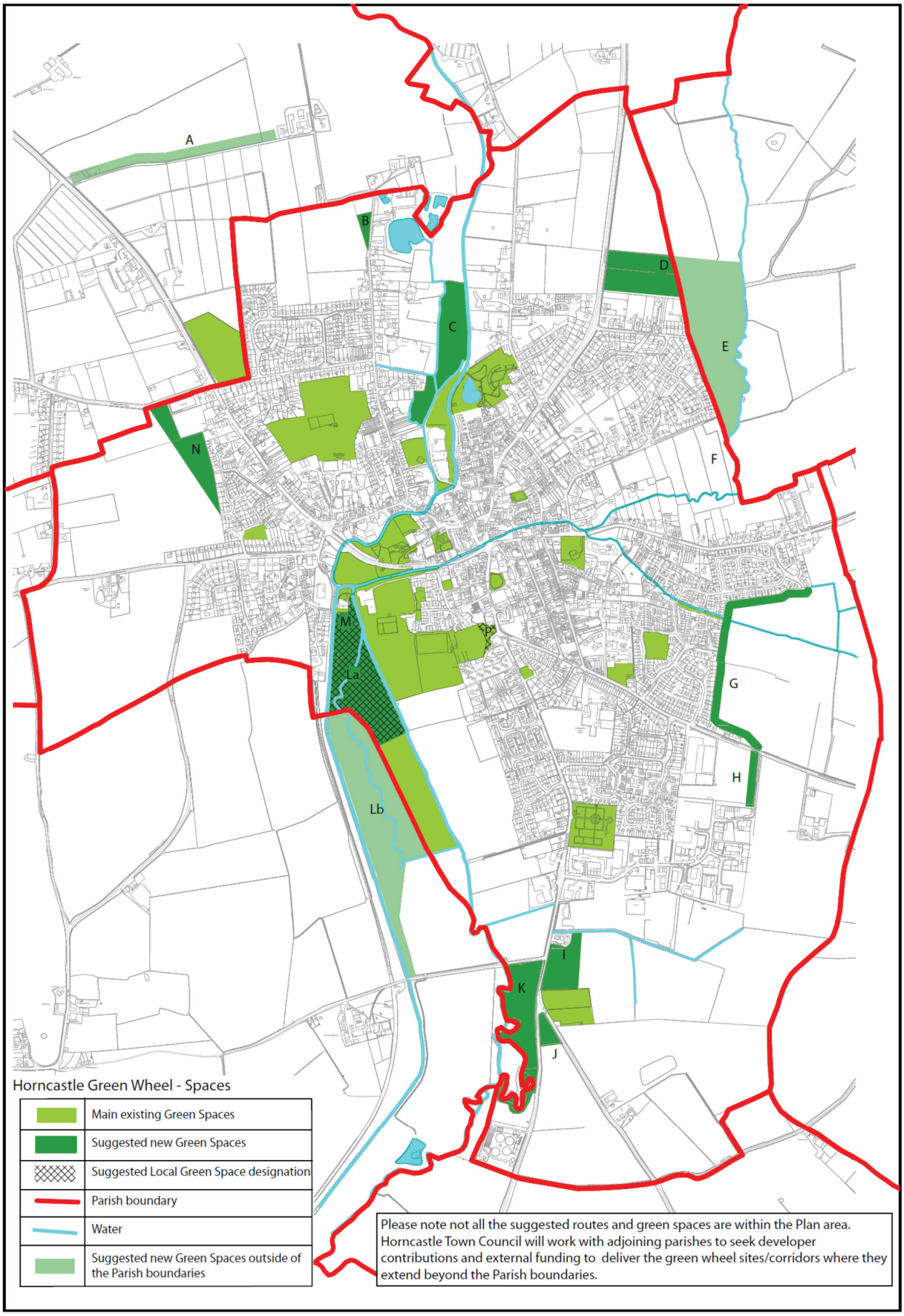


Fig 2 shows the main green space components forming the proposed Horncastle Green Wheel



Linkages

To maximise existing assets and contribute to the wider GI network (beyond Horncastle and its immediate environs), the local GI network should include links to:

The Viking Way is a long distance footpath which starts on the banks of the Humber in the north and winds its way through Lincolnshire to finish on the shores of Rutland Water, a total of 235km (147 miles).

http://microsites.lincolnshire.gov.uk/countryside/visiting-the-countryside/walking/viking-way/

The Spa Trail
http://www.woodhallspa.org/leisure_spatrail.html

National Cycle Network
http://www.sustrans.org.uk/ncn/map/route/route-1

Route 1 of the National Cycle Network passes near to Horncastle at Woodhall Spa. Route 1 is a long distance cycle route (1,695miles) connecting Dover and the Shetland Islands, mainly via the east coast of England and Scotland that also forms the majority of the British section of the North Sea Cycle Route

Principles

The proposed principles below have been developed through extensive consultation elsewhere in the country on similar GI projects. Local consideration should be given as to whether they are all appropriate for Horncastle, and whether any additional principles reflecting the local area should be added.

Where possible, linear routes should:

- Be traffic free
- Be safe and inspire confidence in visitors
- Offer 'easy access' i.e. be reasonably easy to use for users with a wide range of mobility levels, including pushchairs and walking aids
- Have the potential for future upgrading to use by cyclists (where not already possible)
- Have designated, safe crossing points over motorised routes
- Provide connections between where people live and where they want to travel (for recreational or employment purposes)
- Be clearly signed and easy to follow
- Be well maintained
- Provide enhanced user enjoyment through the provision of information boards and benches in attractive locations
- Where appropriate provide access for horses, particularly links to existing bridleways
- Be protected from future development. Where future development does occur, any existing sections of the Green Wheel should remain as inner route options and new outer sections created.
- Cause no damage to archaeological sites and their setting
- Provide safe passing places on those paths with shared vehicular use including appropriate management of vegetation to the sides

Accessible green spaces should:

- Be safe spaces that inspire confidence in visitors
- Cater for a wide range of user-types (dog walkers, playing children, joggers, family groups, older people)
- Provide attractive landscapes
- Provide opportunities for wildlife, heritage conservation and interpretation
- Provide informal recreation opportunities (including playing, bird watching, etc)
- Provide interactive interpretation through information boards, play structures/ environments and art features to encourage more people and a wider audience into the countryside
- Be well maintained

The wider landscape should:

- Protect, enhance and create aesthetically pleasing views
- Have well maintained hedges
- Enable interconnectivity of habitats
- Protect, manage and enhance the historic environment

Standards / Specifications

To support the creation of the route within the above basic principles, a series of standards based on national guidance are proposed below. The proposed standards and specifications have been developed through extensive consultation elsewhere in the country on similar GI projects. Consideration should be given as to whether they are all appropriate for Horncastle, and whether any local standards required by east Lindsey District Council should replace these.

Widths

For an un-segregated, shared use path, guidance generally points towards a preferred minimum width of 3m, although a minimum width of 2m may be acceptable where usage is low, provided there are no side constraints (i.e., there should be space to the side of the path to use to allow passing). A greater width will provide an improved level of service.

	Standard	Minimum	Where width is physically restricted*
Shared use path	3m	2.5m	2m
Footpath links	2.5m	2m	1.5m

*Restricted access will usually be where all or part of the route is using a pre-existing alley way or where there are other significant structures which physically prevent the allocation of a greater width. Paths should conform to the general policy in as far as possible. Where there are localised intrusions and/or short lengths over which the path would be less than 2m wide this may be acceptable depending on the circumstances.

In keeping with the Green Wheel principles, where possible the route should be set within a landscape and wildlife corridor; and not be limited to the width of a path.

Surfacing standards for new paths:

It is anticipated that the Green Wheel routes will have a range of surfacing types. This range of surfacing will form a hierarchy of standards based on the level of expected use, landscape sensitivity and other factors. The optimum level of surface should always be sought for the expected level of use:

Level 1: Bound surface – e.g. Bit Mac Tar/Mac
Level 2: Unbound surface – e.g. road planings and granite dust blinding
Level 3: a) Re-enforced grass
b) Well maintained farm track
Level 4: Rolled/consolidated grass or compacted suitable ground

Routes which are more urban in setting and expected to have high levels of use should be Level 1 (Level 2 minimum). Routes which are more rural in setting and expected to have lower levels of use could be Levels 3 and 4.

Structures

Structures will be required at many locations for a range of purposes including, stock control, limiting unauthorised/ vehicular access and safety (to reduce speed at junctions with roads).

With the exceptions of highway safety, barriers, including motor cycle/ staggered/ kissing gates, should only be a last resort. They should only be used to address actual problems, not to alleviate fears of future potential problems. They should only be installed when other methods have been considered or trialled and been discounted, or have proved to be ineffective. Even when a barrier is installed, it should ideally only be in place for a limited period until the problem has stopped or considerably reduced.

Design solutions should minimise the obstacle to legitimate users as barriers which stop motorcyclists are likely to also exclude wheelchair / scooter users, parents with prams and pushchairs, some users with mobility impairments (for example, sticks and crutches) and some visually impaired people.

Gradients
Green Wheel routes should be designed to achieve a maximum gradient of 3% with the absolute maximum 5% for lengths up to 100m. On the approach to priority junctions this should not exceed 3%. Where steeper slopes are unavoidable the limiting gradient is 7% for lengths up to 30m.

Junctions and road crossings
Where Green Wheel routes meet or cross the public highway, extra consideration to safety must be given; and Road Safety Officers consulted. Clear signage must be provided, for both users of the Green Wheel and the public highway. Dependent upon sight lines, gradients and other local factors, structures may be required to reduce the speed of users of the Green Wheel on approaches to roads and pavements.

Dropped kerbs at road crossings should be used to improve ease of use and safety, improving comfort for all users, especially cyclists and pushchair/ wheelchair users.

Signage, way marking and mapping
Signage for the Green Wheel should be clear, informative and consistent. A Green Wheel symbol/ logo and colour scheme will be utilised.

Signposts should be used at all junctions and access points to the 'rim' of the Green Wheel. Destinations and distances, both into town along key 'spokes' and around the 'rim' will be identified.

Waymarking should be used to supplement the main signage and should provide directional information. Waymarking should be undertaken in accordance with CBC's Countryside Access Waymarking Policy.

Additional information about the Green Wheel, including a map of the entire wheel, will be provided at key access points.

The issues of signage, waymarking and mapping, along with identity, marketing, promotion and information provision will be addressed more fully in a supporting document (to be produced once this document is adopted).

Fencing and hedges
The route of the Green Wheel should be aesthetically pleasing, wherever possible maintaining a 'green' setting through appropriate planting and landscaping.

Planting and landscaping requirements will vary greatly around the Green Wheel, influenced primarily by available space and degree of rural/ urban setting.

All planting along the 'rim' and the more rural 'spokes' should be of native, locally distinctive species. Planting within more urban settings should be decided with robustness and maintenance as key factors.

Wherever possible, Green Wheel routes should not be 'fenced-in', with users having a feeling of being contained or funnelled. However, at certain access points and other areas, such as where stock is grazing or for safety, fencing will be required (although the route and adjacent land should provide a corridor feel).

Fencing specifications should be robust and in keeping with their immediate setting. In general, rural settings should have timber fencing which should be of a similar design to any adjacent existing fencing. Where no existing fencing is present, posts should measure a minimum 125mm x 75mm and rails 100 x 50mm.

Fencing specifications in more urban settings will be determined by primary function (safety, security, etc), but in all cases should be as attractive as possible and in-keeping with surrounding structures.

Green Space standards
Green spaces forming the Green Wheel will range from linear paths and corridors, through amenity green spaces to natural and semi-natural open spaces in the wider countryside. All components of the Green Wheel should deliver multiple green infrastructure benefits – linking and maximising the quality and value of access, landscape, biodiversity and heritage. Sites forming the Green Wheel will:

- be clearly signposted to and from the Green Wheel and the wider network
- be welcoming and clean and safe.
- may incorporate public realm features (e.g. sculptures)
- will provide seating, in both sunny and shaded areas
- have a naturalistic appearance
- have attractive views out of or across the site
- make good use of topography, space and planting
- protect, manage and provide opportunities for interpreting the historic environment
- provide informal and engaging activities for people of all ages
- seek to maximise ecological value and opportunities

New green spaces will be identified where they extend, buffer or link existing sites (particularly those with high biodiversity or heritage value); or where they contribute to creating an accessible corridor.

Wider landscape
As part of this project we are seeking to increase the quality of the environment surrounding the town. It is critical that this masterplan acts as a challenge to all land managers to seek to maintain and develop the quality of the land they manage through the restoration and creation of interconnecting habitats, including pollarded willows, hedges, and woodlands; wetlands and ponds. Derelict and urban fringe sites should be explored for enhancement opportunities.

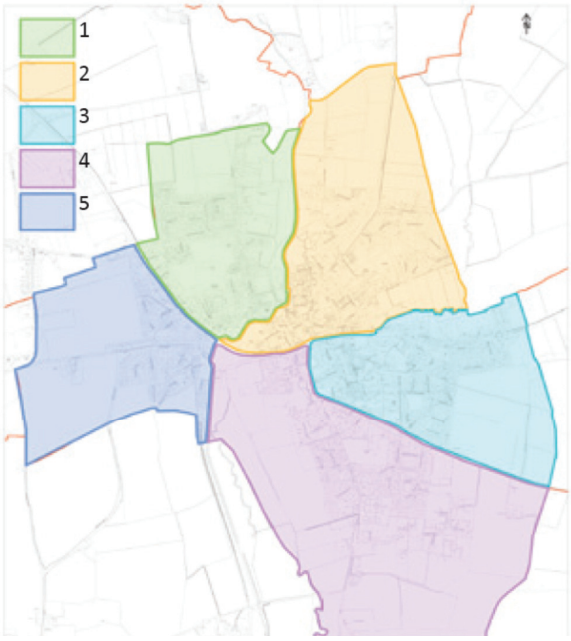
Maintenance
To guarantee maximum value, use and longevity of the Green Wheel once it is developed, it will need to be maintained to a proper standard and to encourage people to use it. Ongoing maintenance work will have to include verge cutting and surface spraying for which revenue funding will be required.
Careful consideration should be given, when any planting or landscaping is proposed, to ensure that it will not become a problem in the future. Where appropriate, a sealed surface should be considered at the development stage to reduce maintenance liabilities in the future.

Impacts and Constraints
It is acknowledged that the implementation of any of these above standards have the potential to have a negative impact upon features of ecological, heritage or landscape value. Such features may be both assets and constraints on an individual site basis and the application of standards for the creation and maintenance of the Green Wheel infrastructure may need to be amended accordingly.

Key Components of the Green Wheel

The Green Wheel will utilise existing and create new GI features. This section of the report outlines the main features (existing and proposed) which will form the Green Wheel. This section focusses on the GI themes of access and green space, making reference to significant points of heritage, biodiversity and landscape where appropriate.

To enable the Green Wheel to be considered, planned and delivered in manageable lengths, the route of the outer rim should be divided into a number of sections. With no strong GI drivers for defining these sections, the author has chosen to use the 5 Spatial Character Areas as identified in 4.1 of the Horncastle Urban Structures Study, a complementary report within the Horncastle Neighbourhood Plan.



Based on the town's topography and landform, it's historic development, and it's spatial characteristics, it is possible to divide the town into five broad sectors for more detailed consideration and guidance. These are defined as:

Sector 1: Lincoln Road to the river Bain including Prospect Street.

Sector 2: The river Bain to the river Waring including Louth Road.

Sector 3. The river Waring to Mareham Road.

Sector 4: Mareham Road to the old river Bain along the parish boundary and the river Bain nearer town.

Sector 5: The river Bain to the Lincoln Road including Langton Hill.

Section 1 – Lincoln Road to the River Bain

1.25 miles / 2km

East of Lincoln Road, an existing Public Right of Way follows a 'green lane' for approx. 0.5miles / 0.8km.

PRoW east of Lincoln Road, looking east

The lack of Rights of Way and obvious off-road opportunities require the central part of this section to utilise the quiet roads of Elmhirst Lane and Prospect Street. Although not ideal, wide grass verges and pavements increase the safety and enjoyment of using these sections.

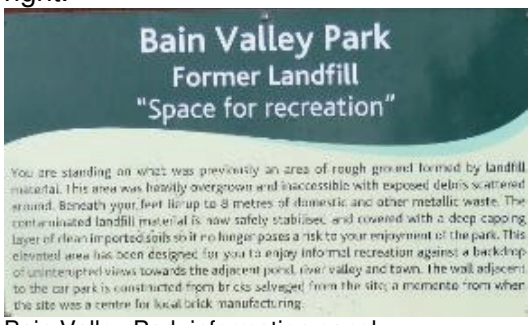
Elmhirst Lane, looking west

The existing access routes and green spaces of Prospect Street Park and the corridor along the western side of the River Bain, including Millennium Wood, are important links in this section.

Prospect Street, looking north east

River Bain corridor & Millennium Wood, looking north

Section 2 – River Bain to the River Waring *(160m N of Spilsby Rd)*
1.1 miles / 1.7km
The River Bain and the Bain Valley Park on its eastern bank are key components in the Green Wheel, with the latter being a destination in its own right.



Bain Valley Park information panel

To the east of Louth Road, the only existing off-road access route in this section is a Public Footpath south from Low Toynton Road, linking with an Unmade Road at the eastern end of Bowl Alley Lane; which can form a spoke of the Green Wheel.


Public Footpath south from Low Toynton Road, looking south

The River Waring has the potential to be a focus for the Green Wheel in this section, through the creation of new access routes and green corridors/ spaces, based on the existing cluster of grazed meadows.


Grazing meadows beside the River Waring, looking south

Section 3 – River Waring to Mareham Road

0.7 miles / 1.1km

Very little GI provision currently exists within this sector. The strong built edge to the town is bordered by arable fields with comparatively low levels of biodiversity and landscape value.

Arable fields along built edge of town, looking west

An attractive green corridor along Thunker Drain does however provide a GI spoke into the town.

Thunker Drain corridor, looking west-north-west towards town

Section 4 – Mareham Road to the Old River Bain

1.3 miles / 2.2km

A 250m Cycle Track south of Mareham Road, although short, is a significant component as it is an example of an ideal access route.

Cycle Track south of Mareham Road, looking south

A large gap in GI provision exists in the centre of this sector, before continuing on to the Horncastle Community Woodland and Old River Bain Grassland (SNCI) sites.

Horncastle Community Woodland information panel

Towards the centre of the town, west of South Street and south of the A158, is a large cluster of existing green spaces – primarily sports pitches; with the area known as The Wong. The recreation and heritage and importance of this site to the community should be recognised in its designation as a Local Green Space through the Neighbourhood Plan process.

<u>Section 5 – Old River Bain to Lincoln Road</u>
2.4 miles / 3.9km
This section includes the most significant existing GI assets including:
-the disused Horncastle Canal/ River Bain, with its associated Public Footpath;


Public Footpath along Horncastle Canal/ River Bain, looking north

-the Public Bridleway along the disused Horncastle Railway;

Public Bridleway along the disused Horncastle Railway, looking north

-Banovallum Carr - a Woodland Trust wet-woodland nature reserve.

Despite these good GI components, the remainder of the section, to the north west edge of the town, currently has poor GI provision.

Principal Delivery Issues

Each section of the Green Wheel will have many individual elements which will require detailed proposals. This part of the report highlights the most significant of those elements.

Numbered reference points relate to access related proposals on Fig 1.

Lettered reference points relate to green space related proposals on Fig 1.

Locations marked with (X) identify the need for safe road crossing proposals on Fig 1.

The numbered and lettered reference points start from the north west corner of the town and follow in a clockwise direction.

All new access routes, unless stated otherwise, are proposed to cater for pedestrians and cyclists, as a minimum; with horse use where appropriate (where widths and linkages allow).

The text below identifies potential types / uses of proposed new green spaces. Such proposals are informed by current use/ management, adjoining land uses; and perceived gaps in location and type of provision. However, further surveys (ecological and historic landscape) and local consultation (land owners and residents) will be required to ascertain appropriateness and need.

Not all of the proposed green spaces are within the Plan area. Horncastle Town Council will work with adjoining parishes to seek developer contributions and external funding to deliver the green wheel sites/corridors/footpaths where they extend beyond the Town Council's boundaries.

Section 1 – Lincoln Road to the River Bain

East of Lincoln Road, an existing Public Right of Way follows a 'green lane' for approx. 0.5miles / 0.8km. (The LCC Access map identifies this route as an 'Unmade Road', but on-the-ground signage identifies it as Public Footpath). The surface of the path **1** will need to be upgraded to Green Wheel standard and the status of the path checked and upgraded if needed to allow cycle use.

The route, while green and attractive, should be widened (ideally to 50m+ / 4 ha+) to create an accessible corridor **A** delivering open space and habitat and landscape benefits, in addition to the linear access. To the south is a large area of land subject to appeal for a residential development. This GI corridor should be provided, either as part of any future development or in its own right. A mix of specimen trees, small copses and open grassland/ wildflower meadow will cater for informal recreation; alongside the creation of various habitats and an attractive built edge : countryside interface.

The grass verges along Elmhirst Lane are suitable to be used as a refuge from occasional passing traffic, but the addition of appropriate signage to inform drivers of the presence of walkers / cyclists should be considered.

A triangular field off Elmhirst Lane with an existing Public Footpath has the potential to become a component of the Green Wheel. Upgrading the status and surface of the

Footpath **2** would enable cycle use and the field (0.66 ha) could be planted as a community orchard or woodland **B**.

Signage and on-road / pavement markings along Prospect Street should be considered.

An existing link toward the River Bain exists through Prospect Street Park and the green corridors surrounding the Tesco store. However, a more direct route, closer to the edge of the settlement should be sought. Opportunities to secure a multi-user link **3** through Corn Close, across potential new GI green space and across the River Bain (via a bridge) to Bain Valley Park should be explored.

The proposed GI green space **C** on the western side of the River Bain measures approx. 3.5 ha and should be managed either as accessible riverside grazing meadow or as woodland / wet woodland, extending the small existing Millennium Woodland.

The River Bain itself is a SNCI north of the town centre.

Section 2 – River Bain to the River Waring *(160m N of Spilsby Rd)*

Bain Valley Park to the west of the river, and the river itself, are key components in the Green Wheel, with the former being a destination in its own right. Opportunities to formally link the Park (as a spoke in the Green Wheel) to the town centre via a path **4** on the eastern side of the River Bain / beside Bells Yard Close should be explored. An existing, informal 'desire-line' path, leads from the south west corner of the Park. A less attractive route through bells yard Close and via North Street to the town centre does exist.

A link between Hemingby Way and Louth Road will be required. Ideally an off-road route to the north of the Oak Tree Meadow houses should be provided **5**; but an alternative option may be to utilise Oak Tree Meadow, requiring only a shorter section of new field-edge path immediately west of Louth Road

Consultation with Local Authority Highways will be needed to establish any signage / works required to provide a safe crossing point **(X)** on Louth Road.

Given the need for a new access route to link **6** Louth Road and Low Toynton Road and the deficit of accessible green spaces in the north east / east areas of the town, a significant area of new GI green space is proposed **D**. Currently predominantly arable, this area (approx. 6 ha) could be planted as a woodland, offering multiple community and biodiversity benefits and complimenting the scattered small woodland areas to the east, at the entrance of the Lincolnshire Wolds AONB.

Consultation with Local Authority Highways will be needed to establish any signage / works required to provide a safe crossing point **(X)** on Low Toynton Road.

To the south of Low Toynton Road, grazed meadow between the built edge of the settlement and the River Waring provides an attractive setting for an additional approx. 4.75 ha of accessible green space **E**. While maintaining the grazed grassland, open access and informal recreation opportunities could be provided, either with a strict dogs-on-lead byelaw or fencing parcels of land to alternate areas

being grazed and free of livestock. Habitat enhancements and erosion control measures along the River Waring could be designed to also deliver community and landscape benefits.

Green spaces [D] and [E], either side of the Low Toynton Road are part of Manor Farm SNCI – a site chosen in 1971 to demonstrate farming and wildlife. However, now predominantly arable, the area is currently of low ecological value, but with potential for improvement.

Taking sites D and E together, their location adjoining a large residential area and the nature of the areas being quiet with good potential for wildlife and recreation enhancements, it is proposed that these sites are developed as managed as a coherent GI asset.

This area has the potential to continue southwards as a green corridor **F** (approx. 1.5 ha) to the west and then south of the River Waring towards Spilsby Road. This corridor incorporates Bowl Alley Lane Paddock SNCI; and links to Bowl Alley Lane SNCI, a spoke for the Green Wheel leading to The Saint Lawrence School.

The existing Public Footpath south of Low Toynton Road should be upgraded **7** in both status and surfacing; and extended further south **8**, over the River Waring via a multi-user bridge and linking to Spilsby Road.

Section 3 – River Waring to Mareham Road

Consultation with Local Authority Highways will be needed to establish any signage / works required to provide a safe crossing point **(X)** on Spilsby Road.

With the exception of the Thunker Drain green corridor, no GI components currently exist in this section of the Green Wheel. It is therefore proposed that a green corridor, incorporating a multi-user surfaced path **9** is created along the urban fringe from Winceby Gardens to Mareham Road (with a number of links / short spokes via Banovallum Gardens, Lodington Court; Wesley Way and Thunker Drain).

Landscaping of the corridor **G** within which the path is set could be in the form of a mix of specimen trees, small copses and open grassland/ wildflower meadow which would cater for informal recreation; alongside the creation of various habitats and an attractive built edge : countryside interface. The corridor could be up to 750m long and should ideally be a minimum of 30m wide (approx. 2 – 2.5 ha) to give an open space feel.

Section 4 – Mareham Road to the Old River Bain

A pavement along the north side of Mareham Road should be restored **10** to its full width, to create a link, for walkers at least, to the existing cycle track leading south. (Even a widened pavement may not be wide enough to cater for cyclists, but the straight and relatively quiet road should not be a major obstacle in the Green Wheel).

Consultation with Local Authority Highways will be needed to establish any signage / works required to provide a safe crossing point **(X)** on Mareham Road.

The cycle track south from Mareham Road should be extended **11** around the perimeter of the 'Holmes Way' industrial estate. Although 2 good links are provided towards the north eastern end of Holmes Way, the road through the industrial estate to Boston road is very busy with high levels of on-road parking. Consequently it is not considered a suitable for a link in the Green Wheel.

The un-used site (or part of it) to the west of the cycleway, if not developed as an extension to the industrial estate could be created as a picnic area / 'pocket-park' **H** (of approx. 1.5 ha), catering both for local residents and for employees of, and visitors to, the industrial estate.

An existing Public Footpath passes along the southern boundary of the industrial estate and although at the western end is wide enough to be upgraded for cycle use; the central section is narrow, passing between a drainage ditch and the industrial estate boundary fence. A new field-edge Green Wheel path **12** should be created to link the southern edge of the industrial estate to an extended Horncastle Community Woodland **I**. Extending the woodland northwards (by approx. 1.25 ha) will almost double the size of the site and bring this under-used community asset closer to the community; and increase its landscape and wildlife value.

To the south west of Horncastle Community Woodland, between the B1183 and Boston Road is an uncultivated field corner **J**. Although the author proposes no public access, the planting of this area (approx. 0.5ha) as a woodland would extend the habitat and landscape value of the Community Woodland. Furthermore, when viewed alongside the Old River Bain Grassland SNCI to the west of Boston Road; this cluster of sites can form a 'Green Gateway' into Horncastle from the south

A pavement leads from the western side of the Community Woodland northwards towards Horncastle. At the junction of 'Thornton Lane' with Boston Road, the pavement switches to the western side of Boston Road. Creating a multi-user route through the woodland **13** and widening these pavements **14** to permit use by cyclists as well as pedestrians will help to create both the main rim of the Green Wheel and a key spoke into the town

Consultation with Local Authority Highways will be needed to establish any signage / works required to provide a safe crossing point **(X)** on Boston Road.

The Old River Bain Grassland SNCI (approx. 8 ha) to the west of Boston Road provides a great example of riverside grassland alongside a meandering river channel. Although the grassland and associated wetland features have previously been damaged, it still provides an important habitat as well as having great potential as an attractive and accessible green space **K**.

To carry the Green Wheel westwards from Boston Road, over the Old River Bain and on to the Horncastle Canal and Railway at Thornton Lodge, a new multi-user path will need to be created **15**. Along much of its length, 'Thornton Lane' has sufficiently wide grass verges on which such a path could be constructed. At the eastern end, a field-edge path may be required.

Section 5 – Old River Bain to Lincoln Road

With the existing linear access routes associated with the Horncastle Canal and Railway (itself and SNCI), the access improvements required to create the Green Wheel are in the northern half of this section.

However there is great potential for maximising the GI network south of the town centre through creating additional accessible GI green space. Between the Woodland Trusts' Banovallum Carr woodland and the Canal lies the Horncastle Canal Grassland LWS. Set away from roads, this tranquil site **La** / **Lb** could be a major addition to the towns open access provision. Some parts of the site may be appropriate to plant as wet woodland, extending the current value of Banovallum Carr; while the majority is likely best kept as seasonally wet grassland, with perhaps the occasional specimen tree to add habitat and landscape interest. The northern and eastern part of this area, Site **La**, 7 ha, is within the parish of Horncastle. Site **Lb**, 8 ha, is outside of the parish of Horncastle. To the north of La, a small green space behind the Horncastle Swimming Pool could become a more formal community green space **M** (0.15 ha), either as a community garden, picnic area, orchard or similar. Taken as a cluster, the existing and potential publicly accessible green spaces in this area would cover a significant 26 ha. The cluster of sites when considered as one would help to meet the ANGSt standard of having at least 1 accessible natural green space of 20 ha or more within 2km of home.

Site La, together with M, has the heritage, landscape and wildlife value; and the proximity to residential areas of the town, to make it suitable for being designated as a Local Green Space through the Neighbourhood Plan process. Consideration should be given as to whether the existing accessible green space of Banovallum Carr should also be put forward as part of the proposed designated Local Green Space.

Although not part of the rim of the Green Wheel, the existing permissive access links Banovallum Carr to the town centre at Cagthorpe. Opportunities should be sought to upgrade the status and surfacing of the permissive path **16** and to provide a link **17** eastwards from the woodland site, perhaps via the allotments off Churchill Avenue. Opportunities should also be sought to increase access options in this area by providing a path **16a** and footbridges **18** over the river and Canal at the location of the old lock, approx. 340m north of the road bridge at Thornton Lodge.

Between the Canal and Railway lies a tapering wedge of grassland. As the railway provides such a good access route, no additional access is proposed on this site, but seeding and managing it, or parts of it, as a riverside wildflower meadow would deliver community, landscape and biodiversity benefits.

The Public Bridleway along the disused railway line ends at a linking path to Station Lane / The Sidings; although the path continues north as a Public Footpath to Langton Hill. As a quiet residential road with good pavements, Station Lane is acceptable as a link in the Green Wheel.

Consultation with Local Authority Highways will be needed to establish any signage / works required to provide a safe crossing point **(X)** on Langton Road, to access the existing cycleway on its northern side.

Osbourne Way is another quiet residential road providing an acceptable link northwards; however opportunities should be explored to create a new off-road route **19** linking a Close towards its southern end to the B1190. This new link should pass through a green corridor created on the western side of the residential area to provide a green space **N** of approx. 2.5 ha, for informal recreation.

The north western section of the Green Wheel is the most problematic in terms of identifying an obvious, direct and attractive access link to Section 1. The options seem limited to enhancing the existing **20** and creating new **21** pavements along the B1190 (westwards) and Green Lane to provide an 'outer rim'; or enhancing the existing pavements along the B1190 (eastwards) and Accommodation Road. A final option, which would increase connectivity, but may not be preferred by users, would be to enhance the existing pavement **22** along the eastern side of the A158, leading northwards from the settlement edge.

Either options, or both, if both chosen, will require consultation with Local Authority Highways to establish any signage / works required to provide a safe crossing point **(X)** on the A158.

The protected green space north of Accommodation Road should be extended **O** (1.5 ha) to buffer against future development and to create an accessible parkland for informal recreation for residents in this sector of the town.

The Wong, **P**, is an existing green space, not on the route of the Green Wheel 'rim', but is an important existing community asset. Due to it's local importance and central location it is proposed it is forward as part of the proposed designated Local Green Space.

Conclusion

This report identifies the clear potential for the creation of a valuable GI network in and around Horncastle.

Existing GI assets, when combined with the creation of new GI provision, including within the possible developments around the town, have the potential to provide a high value GI network, based on the concept of a Green Wheel.

The above proposals identify a total of approx. 52 ha of potential new publicly accessible green spaces.

The following sites are proposed for designation as Local Green Spaces:

- Sites L & M together (and possibly the existing 4 ha of Banovallum Carr) – seasonally wet grassland (L, 15 ha) and a small park area (M, 0.15 ha).
- Site P - The Wong.

This GI provision will serve the residents of Horncastle, providing recreation and healthy lifestyle opportunities within a landscape rich in heritage and wildlife.

Funding to implement the Green Wheel will be required from many sources. S106 / CIL contributions from all local development, in addition to on-site provision of Green Wheel routes, links and green spaces will be pursued as a principle means of delivering the Green Wheel.

Cliff Andrews
BRCC, September 2014

Appendix 1

Green Wheel Delivery Action Plan

Action type	Map ref	Location	Narrative
Path Upgrade			
	1	Lincoln Rd – Elmhirst Ln	Upgrade 840m of path surface to multi-user specification. Check legal status of path and if needed upgrade to allow cycling.
	2	Triangular field off Elmhirst Ln	Upgrade status and surface of 200m of footpath to multi-user specification.
	7	South of Low Toynton Rd	Upgrade status and surface of 290m of footpath to multi-user specification.
	10	North side of Mareham Rd	Restore 180m of pavement to full width to carry 'rim' of Green Wheel.
	14	Boston Rd	Restore 125m of pavement on east side of road, south of Thornton Ln, to full width to carry 'rim' of Green Wheel. Restore 250m of pavement on west side of road, north of Thornton Ln, to full width to carry 'spoke' of Green Wheel towards town centre.
	16	Banovallum Carr	Upgrade and improve surface of permissive footpath from Banovallum Carr to the town centre at Cagthorpe; as an improved walker's route / 'spoke'.
	20	B1190	Restore 630m of pavement to full width to carry 'rim' (westwards) and 'spoke' (eastwards) of Green Wheel
	22	A158 Lincoln Rd	Restore m of pavement to full width to carry either 'rim' or 'spoke' of Green Wheel (dependant upon whether 20 (west) and 21 are developed as 'rim' or not).
Path Creation			
	3	Corn Close – Bain Valley Park	Create a multi-user link (approx. 200m) through Corn Close, across potential new GI green space and across the River Bain (via a bridge) to Bain Valley Park
	4	Eastern bank of River Bain	Create 'spoke' link from green Wheel to Town Centre.

	5	Hemingby Way - Louth Road	Create a 280m multi-user link for the Green Wheel 'rim'. Alternative option may be to utilise Oak Tree Meadow, requiring only a shorter section (estimate 75m) of new field-edge path immediately west of Louth Road.
	6	Louth Road - Low Toynton Road	Create a 400m multi-user link for the Green Wheel 'rim'; as part of wider green space provision.
	8	North of Spilsby Rd	Create a 450m multi-user link, including a bridge crossing over the River Waring and linking the eastern end of Bowl Alley Ln to Spilsby Rd.
	9	Winceby Gardens to Mareham Rd	Create a 700m multi-user link for the Green Wheel 'rim'; as part of wider green space provision.
	11	Cycle track south from Mareham Rd	Extend cycle track southwards 820m around perimeter of Industrial Estate, as part of 'rim' of Green Wheel
	12	South of Industrial Estate	Create a 420m multi-user link for the Green Wheel 'rim', to link to Horncastle Community Woodland
	13	Horncastle Community Woodland	Create a 200m multi-user route through the woodland as part of the Green Wheel 'rim'.
	15	Thornton Ln	Create a 525m multi-user link for the Green Wheel 'rim' along the wide grass verge of Thornton Ln.
	16a	Banovallum Carr	Create a new walkers link/ 'spoke' between Banovallum Car and the main Green Wheel 'rim' on the western side of the Horncastle Canal, vis x2 new footbridges (18)
	17	Banovallum Carr / Churchill Ave	Create a footpath link / 'spoke' eastwards from Banovallum Carr to Boston Rd / town.
	19	Osbourne Way – B1190	Create a 450m multi-user route through the woodland as part of the Green Wheel 'rim'.
	21	Green Lane	Create a 750m multi-user link for the Green Wheel 'rim' along the wide grass verge of Green Lane, linking the B1190 and the A158.
Bridge installation required			
	3	Over River Bain to Bain Valley Park	To provide northern link in Green Wheel 'rim' over the River Bain.
	8	Over River Waring north of Spilsby Rd	To provide eastern link in Green Wheel 'rim' over the River Waring.

	18	Old River Bain / Horncastle Canal	X2 footbridges (the one over the canal potentially using the lock structure as abutments) to increase walking route options south of the town.
Safe Road crossing required			
	X	Louth Rd	To carry main Green Wheel 'rim' across Louth Rd
	X	Spilsby Rd	To carry main Green Wheel 'rim' across Spilsby Rd
	X	Mareham Rd	To carry main Green Wheel 'rim' across Mareham Rd
	X	Boston Rd – Thornton Ln	To carry main Green Wheel 'rim' across Boston Rd
	X	Langton Rd	To carry main Green Wheel 'rim' across Langton Rd
	X	Green Lane - A158 Lincoln Rd	To carry main Green Wheel 'rim' across A158 Lincoln Rd
	X	A158 Lincoln Rd – Accommodation Rd	Either as an additional crossing to increase connectivity, or to carry the main Green Wheel 'rim' if the preferred route utilising Green Lane is not delivered.
Public Green Space creation			
	A	Lincoln Rd – Elmhirst Ln	Create a 4 ha accessible corridor delivering open space, habitat and landscape benefits.
	B	Elmhirst Ln	Create 0.66 ha community orchard / woodland in triangular field.
	C	Western side of River Bain	Create 3.5 ha green space to be managed either as accessible riverside grazing meadow or as woodland / wet woodland
	D	Louth Rd - Low Toynton Rd	Create 6 ha green space to be managed as woodland and to deliver multiple community / biodiversity benefits.
	E	South of Low Toynton Rd	Create 4.75 ha accessible riverside grazing meadow; with associated habitat enhancements.
	F	SE of Bowl Alley Ln – Spilsby Rd	Create a 1.5 ha accessible corridor delivering open space, habitat and landscape benefits

	G	Winceby Gardens to Mareham Rd	Create an accessible corridor, approx. 2 – 2.25 ha with a mix of specimen trees, small copses and open grassland/ wildflower meadow which would cater for informal recreation; alongside the creation of various habitats.
	H	NE of Industrial Estate	Create a 1.5 ha pocket park / picnic area.
	J	Boston Rd / B1183	Plant a small, 0.5 ha, woodland to help create a 'green gateway' to the town. *(Proposal does not include public access).*
	K	Boston Rd / Thornton Ln	Create an 8 ha accessible green space on the Old River Bain Grassland SNCI, which is a great example of riverside grassland alongside a meandering river channel; and provides an important habitat and landscape component.
	La	Horncastle Canal Grassland LWS North	Linking with Banovallum Carr this site, 7 ha, can be part-planted as wet woodland, while the majority is likely best kept as seasonally wet grassland, with perhaps the occasional specimen tree to add habitat and landscape interest. Along with M and possibly the existing Banovallum Carr, designate as a Local Green Space.
	Lb	Horncastle Canal Grassland LWS South	Linking with Banovallum Carr and La, this site, 8 ha, can be part-planted as wet woodland, while the majority is likely best kept as seasonally wet grassland, with perhaps the occasional specimen tree to add habitat and landscape interest.
	N	West of Osbourne Way	Create 2.5 ha accessible green space for informal recreation.
Public Green Space enhancement			
	I	Horncastle Community Woodland	1.5 ha northern extension to the community woodland.
	M	Horncastle Swimming Pool	Formalise existing 0.15 ha green space as a community garden, picnic area, orchard or similar. Along with La and possibly the existing Banovallum Carr, designate as a Local Green Space