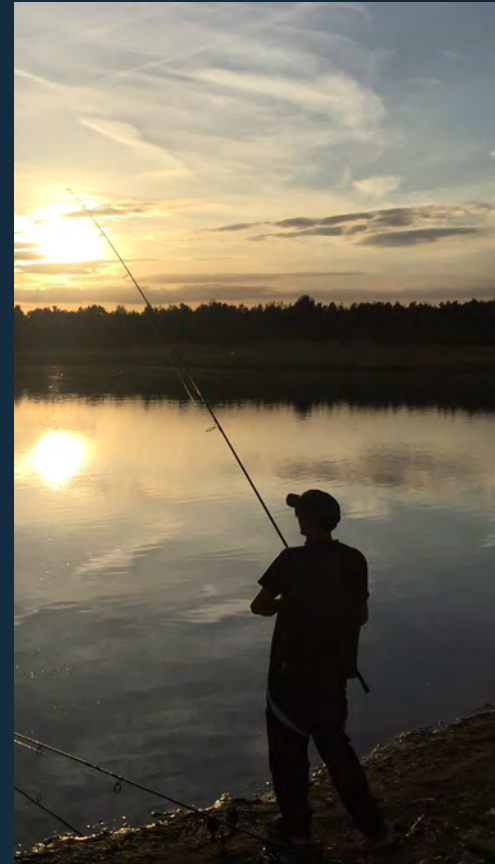




St. Genevieve Lakes



MASTERPLAN

2017



01 INTRODUCTION

1.1 ABOUT THIS DOCUMENT

Thank you for taking the time to consider the new masterplan proposals for St. Genevieve Lakes.

St. Genevieve Lakes is the new name for the site at Park Farm, Ingham. This masterplan for St Genevieve Lakes builds on Policy RV6 and it's adopted concept statement.

This masterplan has been prepared by Corylus Planning and Environmental Ltd to promote high standards of design for the land identified by Policy RV6 of the Rural Vision 2031 Local Plan Document.

A 'Masterplan' displays more detail than the preceding concept statement and provides a basis for later planning applications.

Whilst the details are indicative, the document seeks to lay out the type of opportunities and uses that would allow the site to provide an alternative destination that could absorb the pressures of visitors to the area and mitigate potential effects on the Breckland Special Protection Area (SPA) of tourism.

1.2 TOURISM AND LEISURE AT ST GENEVIEVE LAKES

"The restoration of the land has brought forward the opportunity for the creation of recreational, leisure and tourism facilities serving both the locality and the wider area which will bring both economic and community benefits to the area."

- Quoted Para 15.16 of St Edmundsbury Rural Vision 2031



02 POLICY CONTEXT AND THE CONCEPT STATEMENT

2.1 POLICY OVERVIEW

The masterplan seeks to show the development within the context of current and emerging national and local planning policies and local environmental and infrastructure constraints.

Whilst Policy RV6 is a primary guide, proposals for development of sites subject to Masterplans require consideration against a range of policy documents, including:

- Policy DM2 & DM3
- Concept Statements
- any relevant design guidance
- any development briefs approved by the Local Planning Authority
- any adopted supplementary planning documents.



2.2 POLICY RV6 WORDING

Policy RV6 of the Rural Vision 2031 Local Plan Document was developed as a result of a site submission received during the Rural Vision 2031 consultation in March/April 2012. There is an acknowledged shortfall in country park/recreation facilities to the north of Bury St Edmunds (Green Infrastructure Study, 2009) and this proposal could help meet this need.

RV6 identifies 212 acres (86 hectares) of land for leisure, recreation and tourism whilst seeking to protect agricultural land and areas of landscape value. This policy specifically requires a concept statement and masterplan for the site stipulating it must include;

- 1) Footpath and cycleway access within the site and to nearby villages of Fornham All Saints, Fornham St Genevieve, Ingham and Culford
- 2) Public footpath and public transport links
- 3) Areas of public open space and recreational open space

CONCEPT STATEMENT: CONSULTATION INFORMATION

120 46

Consultation Attendance
22nd October 2015

Representations gathered
On the day and online after the event



Concept Statement Consultation
St Genevieve Lakes | 22nd October 2015

2.3 THE PROCESS SO FAR

You may have visited our public consultation in October 2015, regarding the concept of leisure usage on the site. Thanks to your feedback, the concept statement has since been revised, approved by the St Edmundsbury Sustainable Development Working Party and adopted into policy by the Council.

The concept statement provided the parameters and framework for the development of Park Farm. Its purpose was to inform the preparation of these more detailed masterplan proposals.

Following this consultation, any comments received will guide the final masterplan proposals. Before any planning applications are decided, the masterplan must be adopted by St Edmundsbury Borough Council.

2.4 CONSULTATION OUTCOMES

Key outcomes of the consultation were:

- One vehicular access was desirable in the north east corner.
- The unnamed road running to the north of the site was undesirable for vehicle movements from this development.
- Linking in with the footpath and cyclepath network in the area is of great importance to local people.



2.5 CONCEPT DESIGN PRINCIPLES

“The design would create cycle and path access from within the site to the nearby villages of the Fornhams and Culford with further links to public transport.

The site would benefit from specified areas for the following activities in three phases:

Phase 1 is the northern area and will provide holiday accommodation. The site as a whole has been designed to support aspects of biodiversity and this would be further enhanced by removing modern agricultural practices and creating grassland with a more diverse flora.

Phase 1a is the main area of public access which will provide visitor and tourist facilities, areas of public and recreational open spaces including permissive public footpaths, cycleway access and a circular lake walk. Biodiversity enhancement will be integral to the detailed design of this area.

Phase 2, will be the final phase, this will allow the tree and grassland planting to mature before development commences. Phase 2 will reflect the principles of Phase 1.

It is essential that the applicant needs to create a ‘destination’ at St Genieve Lakes. The development must be sustainable and any permissions granted must include the ability to cater for that need.”

03 SITE RESTORATION

3.1 QUARRY ACTIVITIES

From 1989 to 2015 Tarmac extracted sand and gravel from the quarry. This was done in a phased process over three areas.

The photos show the basis for restoration that resulted from the extraction process. From the onset the Stennett family had the vision of creating the perfect environment for leisure and recreation once the quarry use ceased.



2010

2015



3.2 HISTORY OF THE VISION

In 1989 a Quarry was granted permission at Park Farm by Suffolk County Council as a green field site and as such was designed with the after use of leisure and recreation in mind.

Once the quarry use ceased the land was restored to a mix of species rich grassland and a series of lakes. This has created a diverse and thriving wildlife and ecology. The restoration of the land has delivered the opportunity for the creation of recreational, leisure and tourism facilities serving the locality and the wider area. This would bring both economic and community benefits in full accord with the original planning permission.

3.3 RESTORING THE SITE CONTOURS

As part of the restoration works of the site, both gentle and steep slopes were introduced to create a range of landscape features that incorporate woodland edges and lake formations.

3.4 FLOOD RISK AND DRAINAGE

Three lakes have been created on the site with areas of 24, 12 and 6 acres, these have a maximum depth of 6 meters. The site has a large water storage capacity and is more than 100 metres from any river (Culford stream) or sea floodplain.

The contours of the land (banks surrounding the lakes) and the fact the lakes are not connected to rivers or streams or other form of flowing water ensure that the lakes created pose no flood-risk. The levels of the lakes can be managed to ensure that they do not create any flood or drainage issues

3.5 UTILITIES, FOUL WATER AND SEWAGE

The restored site is currently serviced with 1 Megawatt of electricity capacity, a 32mm water supply and 2 large septic tanks.

If demand from this development requires it, enhancements will be made to the services provided to the site.

3.6 PROTECTING HISTORIC ENVIRONMENT

People have been living at Park farm for thousands of years. Between the 4th and 1st centuries BC Park farm was home to an extensive Iron Age settlement.

With such a high the potential for iron age activity archaeological assessments and investigations, were completed and overseen by the County Archaeologist, before quarrying commenced. As a result all stripping of the topsoil was under archaeological supervision, across all 3 phases of the worked site, with contingency for excavation as necessary.

The areas identified, by this process, as needing further archaeological investigation were excavated firstly by archaeologists, then the sand and gravel extracted by tarmac. The voids were backfilled with the overburden and gravels then finally landscaped and covered with subsoils and topsoils.

Findings included pre historic pottery, flint tools and blades used for cutting and many scrapers for the everyday tasks of preparing food, and preparing hides for leather.

The Archaeology was taken to Moyse's Hall, Bury St Edmunds to be kept and displayed for the local community.



Legend

- Masterplan Boundary
- Existing Trees and Shrubs and Hedgerows
- Tree and Shrub Planting Winter 2014/2015
- Agriculture
- Grassland Flora
- Lakes
- Concrete Hardstanding to be Retained
- Proposed Maintenance / Access Track
- Deer Fencing to all tree / shrub planting blocks (Winter 2104 Planting deer fencing illustrated)

3.7 RESTORATION SCHEME

This Drawing is the Proposed Restoration of the Quarry Landscape at St Genevieve Lakes in October 2014.

Shown on the Plan are the proposed Water Levels of the Lakes above Ordinance Datum.

With slopes to the landform gentle enough for farm equipment to maintain.

3.8 THE RESTORED LANDSCAPE

The restoration of St Genevieve Lakes has taken 30 years to get to this stage, After the removal of 3.5 million tonnes of sand and gravel great care and detail has been taken to create the spectacular landscape that we have today.

The quarry landscaping was specifically designed to utilise thousands of tonnes of left over subsoils to provide the entire area with a complete screening from the outside, and to leave three large lakes in a setting fit for the purpose of leisure and recreation.

Finally this new landscape was then covered in a layer of top soil to allow nature to take a foothold.

Over 40 acres of species rich grassland has been planted, this has been sown with wild flowers such as Yarrow, Red clover, meadow vetchling and Ox-eye daisy's but to name just a few.

Over 40,000 trees have been planted so far. Silver Birch, Field Maple, Oak, Ash, Crab Apple and Cherry are underplanted with Hawthorn, Hazel and Dogwood and Buckthorn, to provide a variety of serial habitats. Holly and Pine have been planted to provide evergreen colour.



In the waterside areas Alder, Goat Willow, Grey Willow and Downy Birch have been planted.

All of these trees have been maintained with a five year programme to ensure proper establishment, any dead or damaged trees replaced and kept safe from Deer and Rabbits by robust fencing to ensure perfect growth.

Lakeside reed beds have been established to create a habitat rich water's edge to provide cover for the many species that now live there, whilst the waters of the lakes have been stocked with Carp.

3.9 LEVEL OF INVESTMENT IN THE SITE

To date the Stennett family have invested £800k in re-contouring, trees and seed mixes and £60k per annum on managing the site.

The development of the site as a tourist destination will allow for further investment, ensuring long term benefits to ecology and wildlife to the benefit of the Borough as a whole.



North Lake
Looking West



West Site Border
Looking South



East Lake
Looking South



West Grassland & Lake
Looking East

04 THE EXISTING SITE IN CONTEXT

4.1 LOCATION OPPORTUNITIES

- The restoration of the land has delivered the opportunity for the creation of leisure, tourism and recreational facilities serving both the locality and the wider area which will bring both economic and community benefits.
- The site lies just 1hr 15min drive north of London and 30min from Cambridge.
- The parishes of Culford, Ingham, Fornham, Great Barton and Timworth in addition to St Edmundsbury residents would gain new leisure opportunities. It was commented at the public consultation that the Livermeres, Honington, Great Barton and Ixworth, plus intervening villages and communities would also benefit.
- Employment will be created in the development of the site; in the form of maintenance, construction, recreational activities, cafe shop and others.
- The introduction of locally sourced cafe / food hall / farm shop would form destinations as part of the area's "food trails", these food trails are a well established Brecks Initiative.

4.2 LOCAL LANDSCAPE IN CONTEXT

The site provides a varied pristine landscape comprising woodland, mix native grass lands and lakes, attractive to a host of wildlife flora, fauna and native aquatic species.

The tourist use will be sensitive to the rich and diverse habitats that have been created. The ability to observe and be amongst native wildlife in such close proximity to the historic core of Bury St Edmunds and the A14 is the developments key attraction.

4.3 LOCAL AREA

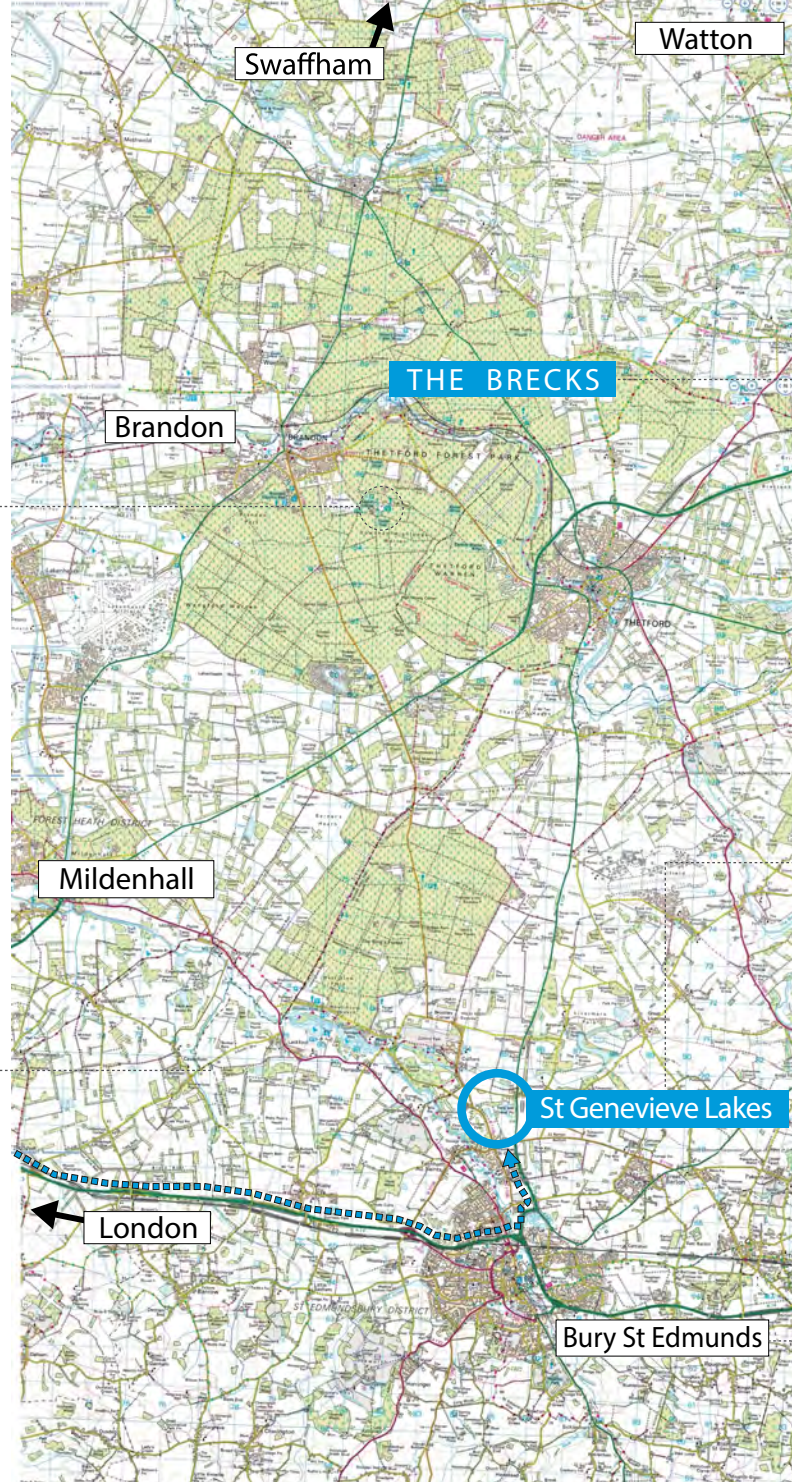
Relationship of site to Bury St Edmunds and The Brecks



High Lodge



West Stow



The Brecks Landscape



St Genevieve Lakes, Ingham



Bury St Edmunds

4.4 FOOTPATHS AND CONNECTIONS

Whilst the provision for east west footpaths and cycleways are good, there is an inability to travel from Ingham / Culford down to the Fornhams without having to use the A134 or the B1106 (which do not benefit from footways).

4.5 PUBLIC TRANSPORT LINKS

Within walking distance of the site are three bus stops which provide the following routes:

- 84 Bus (CSVC Coach Services)
- 86 Bus (CSVC Coach Services)
- 134 Bus (SCCT Suffolk Norse)
- 16 Bus (SESX_Stephensons of Essex)
- 355 Bus (SESX_Stephensons of Essex)

Using these bus services a visitor can get to Bury St Edmunds train station in under 10 minutes (84 Bus & 86 Bus).

From Bury St Edmunds station, trains run on Greater Anglia and Great Northern services to many destinations.

Using a bus and train combination a visitor can get to/from Cambridge in 65 minutes and London in a little over 2 hours.

4.6 SITE VEHICULAR ACCESS

"The proposed vehicular access at the north eastern corner of the site appears to be a good quality access (which previously served a quarry) and our records do not show any injury / accidents there or at the A134 junction in the last 5 years."

- Highways Authority Consultation on the Masterplan.

This existing good quality access in the North East corner of the site it to be used for access for the development.





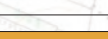

4.7 NOISE INGRESS

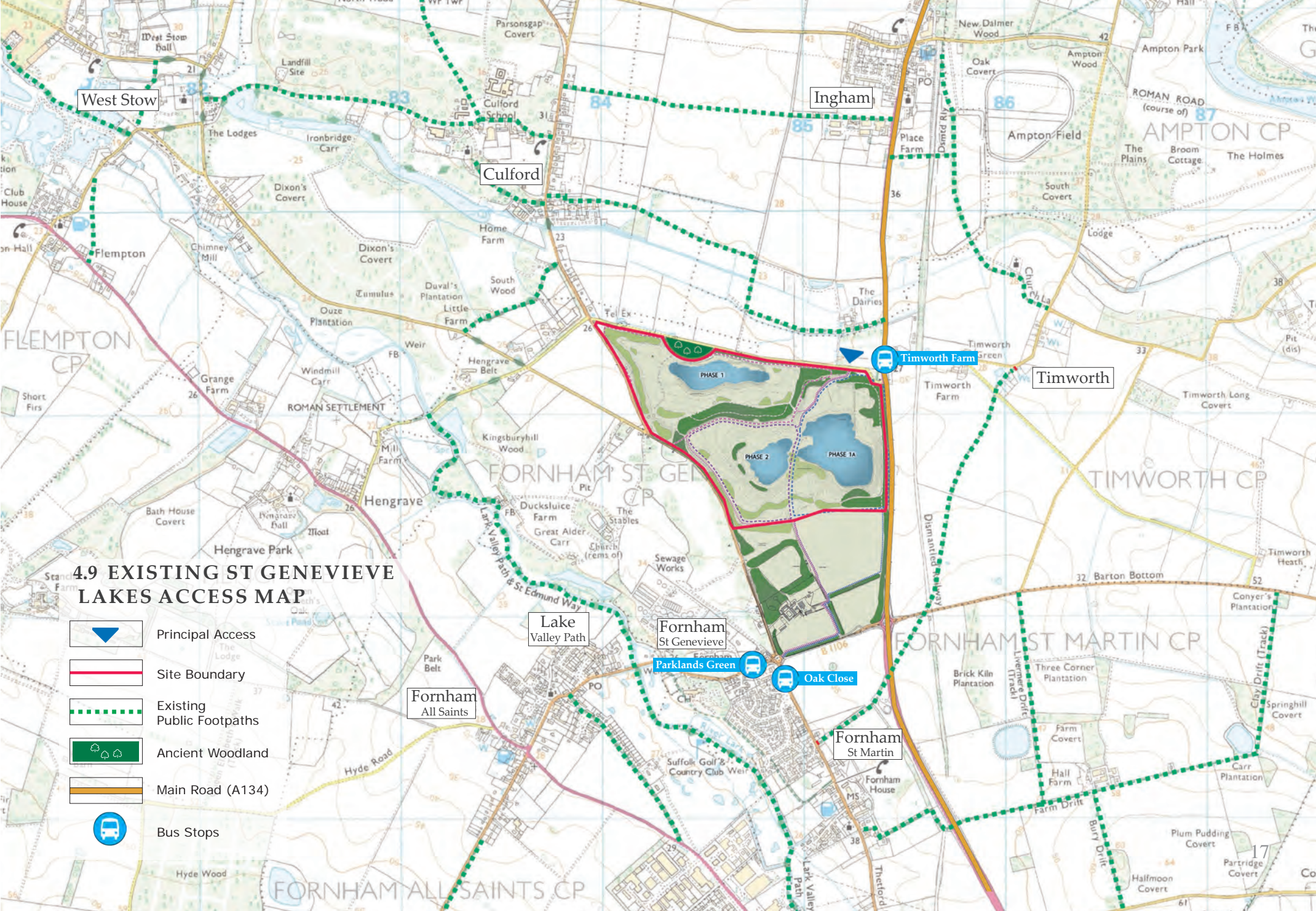
Despite the A134 running to the east of the site boundary and the Culford to Fornham road running along the western boundary, the noise ingress is low due to topography and planting at the site edges; with tree planted earth banks shielding the eastern edge of the site.

4.8 ADJACENT LAND USES

Primarily the land surrounding the site is farmland. To the south lies the Park Farm Business Centre and the continued agricultural holding of the Stennett family. All surrounding uses are compatible with the use of the site for tourism and recreation, without conflict.

4.9 EXISTING ST GENEVIEVE LAKES ACCESS MAP

-  Principal Access
-  Site Boundary
-  Existing Public Footpaths
-  Ancient Woodland
-  Main Road (A134)
-  Bus Stops





AERIAL PHOTO
PARK FARM
Looking North East

KEY

 Park Farm RV6 Area

4.10 SCALE OF THE SITE

For comparison St Genevieve Lakes RV6 has been placed at the same scale next to the Abbey Gardens in the heart of Bury St Edmunds.

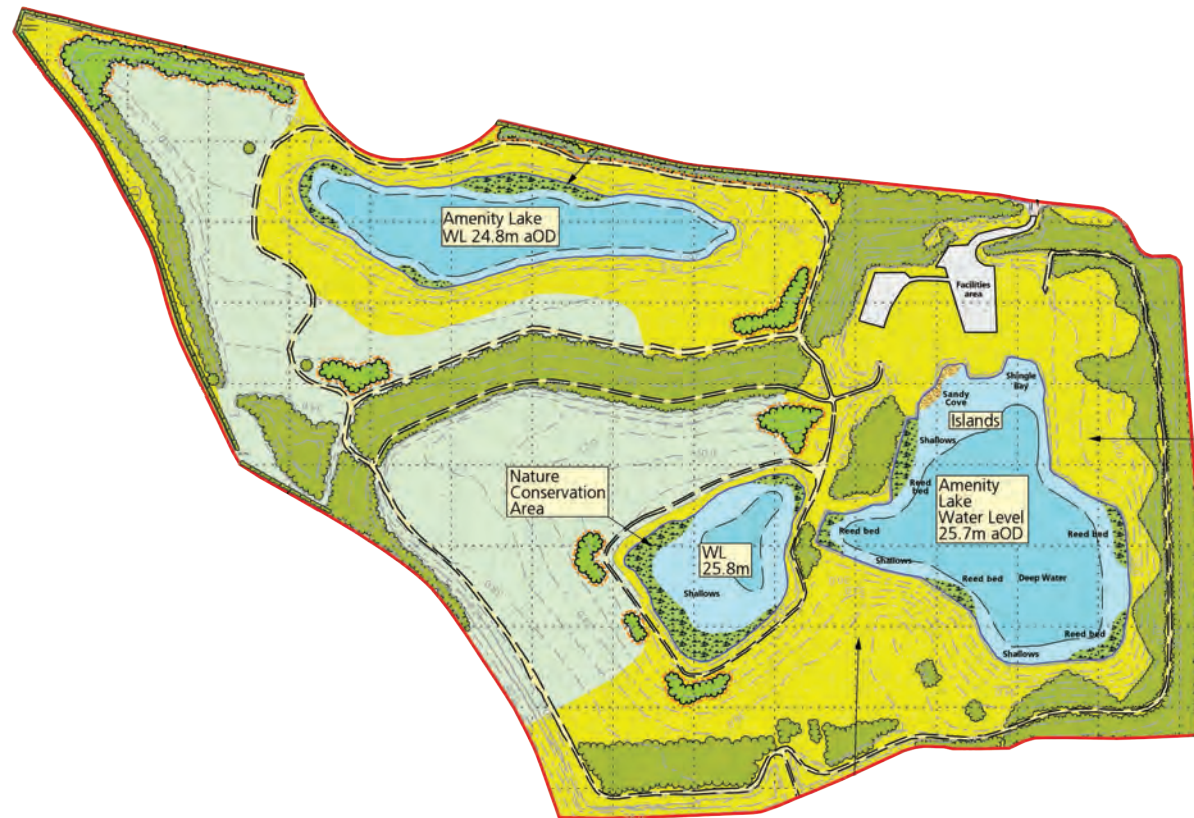
They Abbey Gardens are a little smaller than the eastern most lake, which is around 9 hectares in size.

The scale of the site allows for a multitude of walks and habitats enabling the proposed development and visitors to be accommodated within the landscape without the tranquility and beauty of the area being lost.



Abbey Gardens
Bury St Edmunds

c. 10 Hectares



St Genevieve Lakes
Fornham St Genevieve

86 hectares

05 MOVING FORWARD: THE MASTERPLAN

5.1 OVERVIEW

The design would create cycle and footpath access from within the site to the nearby villages of the Fornhams and Culford with further links to public transport. Biodiversity enhancement would be integral to the detailed design of all areas.

The site would benefit from specified areas for the following activities in three phases:

Phase 1 is the northern area and will provide holiday accommodation. The site as a whole has been designed to support aspects of biodiversity and this would be further enhanced by removing modern agricultural practices and creating grassland with a more diverse flora.

Phase 1A is the main area of public access which could provide visitor and tourist facilities in addition to areas of public and recreational open spaces. Permissive public footpaths, cycleway access and lake walks will also be provided.

Phase 2 will reflect the principles and intent of Phase 1.

5.2 CONCEPT STATEMENT PHASING

The development would begin with Phase 1 and then integrate Phase 1A's public uses. Once this is completed the development would continue with Phase 2.

It is essential that the masterplan creates a 'destination' at Park Farm. The development must be economically sustainable and any permissions granted must include the ability to cater for that need.





5.3 ST GENVIEVE LAKES MASTERPLAN

The masterplan has been designed to work with the restored landscape's existing features.

5.4 KEY DESIGN ISSUES & FEATURES

BOUNDARY PLANTING

Tree and shrub planting will enhance the site edges and provide screening.

ANCIENT WOODLAND

The Ancient woodland is excluded from the development for protection.

LAKESIDE ACCOMMODATION

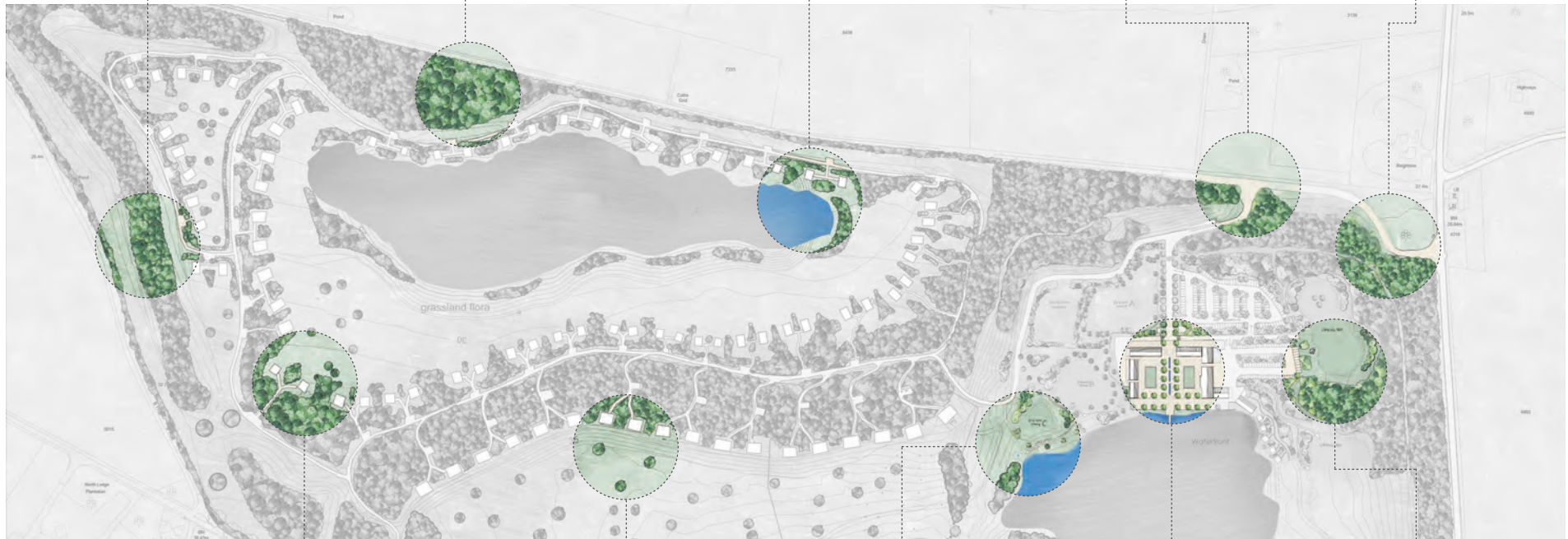
A small amount of holiday accommodation is set near to the lake's northern shore.

ENTRANCE JUNCTION

The existing junction would be used for site access, with visibility splays maintained and gatehouse added to aid route planning and access.

NEW PERMISSIVE ROUTE ENTRANCE

The new permissive route linking the site's north corner to the south.



HOLIDAY ACCOMMODATION

Nestled into the tree planting, a range of accommodation is provided on site.

HILLSIDE SETTING

Some south facing holiday accommodation overlooks a parkland landscape to the south.

EVENTS SPACES

Several events spaces have been set naturally into the restored landscape to provide function and performance space.

PHASE 1A HEART

Close to the entrance of the site is the heart of phase 1A, this includes the public use areas.

CAMPING FIELDS

The less formal camping / glamping accommodation on site has been nestled up into the gentle slopes on the eastern edge of Phase 1A.

06 LAND USES

6.1 USE CATEGORIES



Fishing and other water activities

Fishing areas would be separated from the walking and cycling routes, Whilst gentle watersports and group activity training (such as sailing, kayaking, canoeing etc.) would be best placed on the large eastern lake.



Café and restaurant

Providing food and beverage facilities both during the day and supporting evening functions, the cafe would be closely tied to the barn function space.



Farm shop, craft workshops & retail

With a focus on small niche suppliers related to leisure and recreation, the units would have dedicated parking including ease of access. Seasonal fairs could also benefit from the destination.



Camping and associated facilities

The provision of camping and glamping pods to the east of the public area would allow more people to enjoy the beautiful site.



Team building, business activities & events spaces

In the landscape setting, the combined provision of accommodation, function spaces and food and beverage provision could be used for business and private function purposes.



High quality holiday accommodation

The development could provide up to 100 high quality holiday accommodation units which would enjoy a variety of aspects and plot sizes, whilst the style and design quality will be closely managed to sit into the naturalistic landscape.



Enjoyment of nature

Key groups could include birdwatchers and school groups. Allowing the education of children to respect nature.



Amphitheatre

Could be used as a gathering space or for the performances of plays and other community events.



Leisure, therapy & retreats

As requested at the public consultation, the tranquil setting could create an excellent place for Physiotherapy, Sports Massage and group activities such as yoga or pilates.



Walking and cycling

The new connections into the wider network would enable groups to park or stay at Park Farm and then travel off for the day along dedicated routes.



Car parking

The provision of parking could enable those travelling into the Brecks to leave their cars to the south at Park Farm and travel in by alternative means.



Children's play space

Situated in a beautiful setting whilst close to amenities, a play space would allow families with children of all ages to enjoy the site in a number of ways.



6.2 PHASES 1 & 2

Using existing planting and the lakes created as part of the restoration, the buildings could be set into a naturalistic landscape.

There would be foot and cycle access from the accommodation in Phase 1 and 2 to the amenities provided in phase 1A.

6.3 PROTECTING TOPOGRAPHIC FEATURES AND LANDSCAPE CHARACTERISTICS

The design retains and utilises the existing landform, siting high quality holiday accommodation nestled into treelines. The restored gentle slopes leading down to the lake edges, will remain.

6.4 PROTECTING RESIDENTIAL AMENITY OF OTHER DWELLINGS

Due to the location of the site, and the extended land holding of the Stennett Family to the north and south, only a small number of existing third party dwellings exist close to the site boundary.

Care will be taken when considering proposals to ensure negative effects of a more public usage on the site, will have a limited effect on these locations.

6.5 PROTECTING NEW HOLIDAY ACCOMMODATION FROM EXTERNAL USES

The new holiday accommodation proposed on Phase 1 & 2, would not be subject to adverse effects from any noise, smell, vibration or other forms of pollution from third party external or internal uses of the site.



6.6 PHASE 1A : ARRIVAL

With access to the primary lake and visitors facilities, Phase 1A would form the heart of the site's public activities.

6.7 SENSE OF PLACE

Using the landform created by the quarrying restoration the type of place created in Phase 1A of this development has several key identifying features.

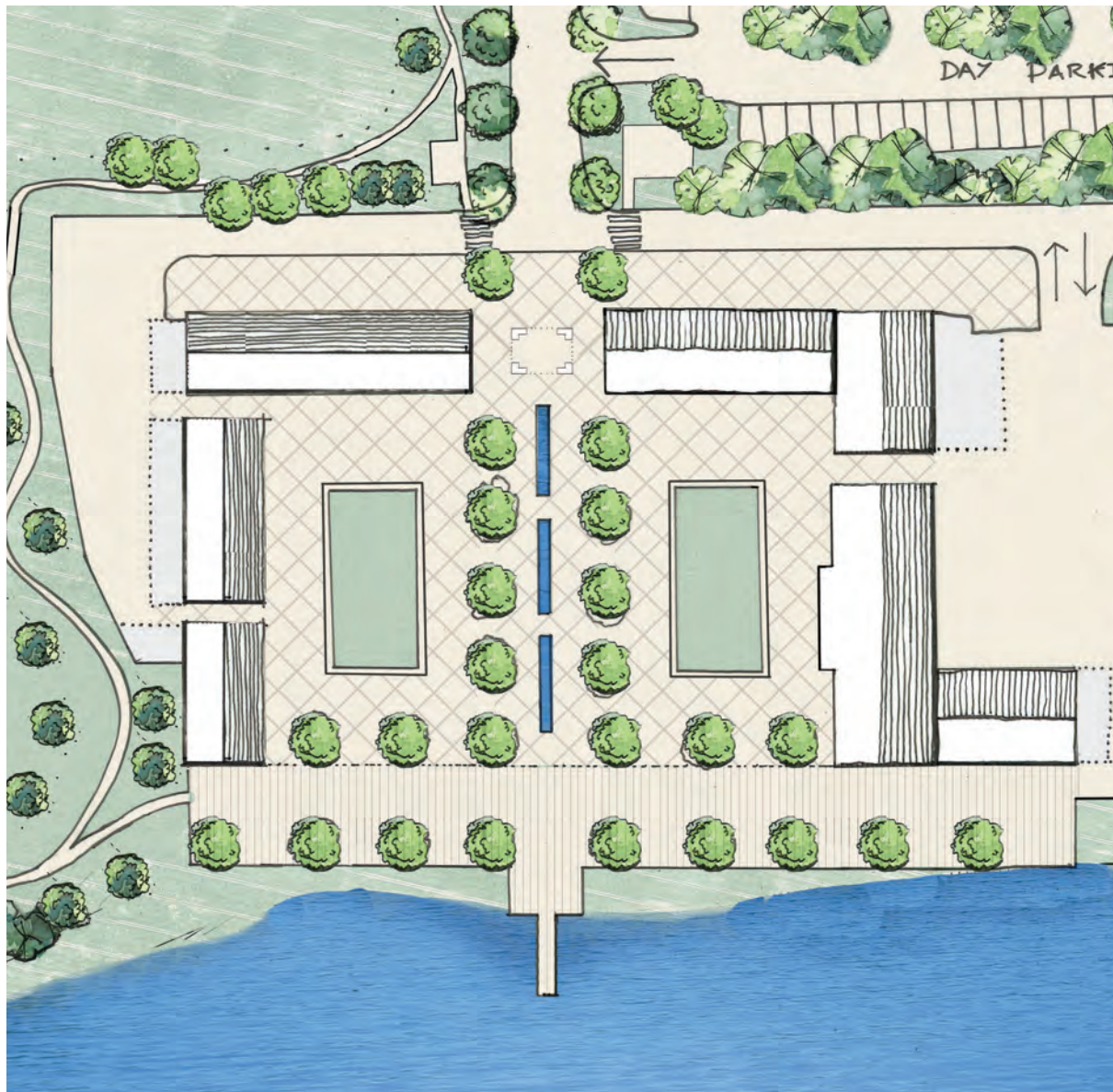
Each space gently slopes in landform down to the lake, with tree and hedge screening enclosing and forming the backdrop to spaces, whilst framing the lakeside views. The buildings form a central courtyard giving a sense of enclosure and focus to the lake views.

6.8 PUBLIC ART

The design provides numerous locations to site public art, these locations could include:

- The Central Courtyard
- The Phase 1A Lakeside walk
- Events Spaces A, B or C

Themes for the public art could include the biodiversity and ecology found on the site with further information provided for educational purposes.



6.9 PHASE 1A : COURTYARD

The courtyard is the focus of the events barn, cafe & restaurant uses and retail spaces.

6.10 SOCIAL INFRASTRUCTURE

The proposals will contribute to the area's social infrastructure through the provision of indoor and outdoor spaces used for community groups, education, and recreation. Play facilities are to be provided in the Phase 1A area.

6.11 PRODUCING SPACES WHICH ARE SAFE

Care will be taken when designing up detailed areas of the site to consider the risks to the public, particularly around the lake edges and steep embankments.

6.12 EMPLOYMENT

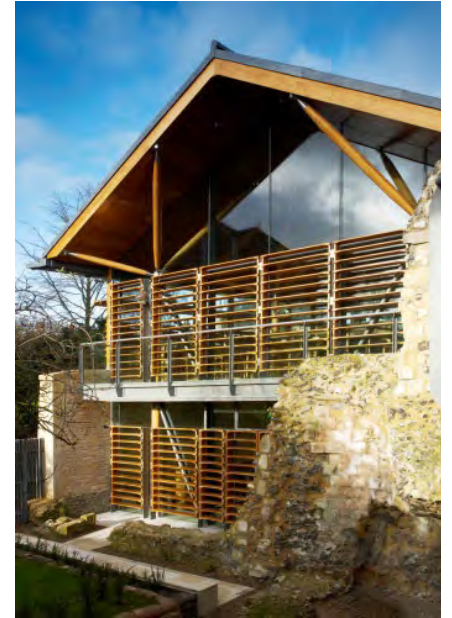
Employment on the site is typically in connection to the staffing, service and maintenance of the central facilities in Phase 1A. Whilst across the wider site, construction, maintenance and upkeep of the holiday accommodation and landscape will feature. The events spaces and events barn will see more activity around events with the local economy benefitting from service providers utilised in the area.

07 BUILDING TYPOLOGIES & MATERIALS



7.1 PUBLIC PHASE TYPOLOGIES

In phase 1A, the buildings focus on enclosing a courtyard and providing spaces suitable for public uses such as events, retail and relaxing. With a preference for agricultural style timber sided buildings, a series of building styles are required on site, ranging from courtyard style buildings in area 1A and Suffolk type barns for events.



7.2 HOLIDAY ACCOMMODATION

Primary drivers for the building style include views out and the ability for the low profile holiday accommodation development to sit in a tree planted setting.



7.3 BUILDING MATERIALS

The local vernacular features flint, timber boarding, clay roof tiles and Culford white and red bricks. External visible structural framing might feature expressed timber. The focus on low embodied carbon materials and building practices will assist in meeting the environmentally sustainable aspirations of the development.











7.4 LANDSCAPE MATERIALS

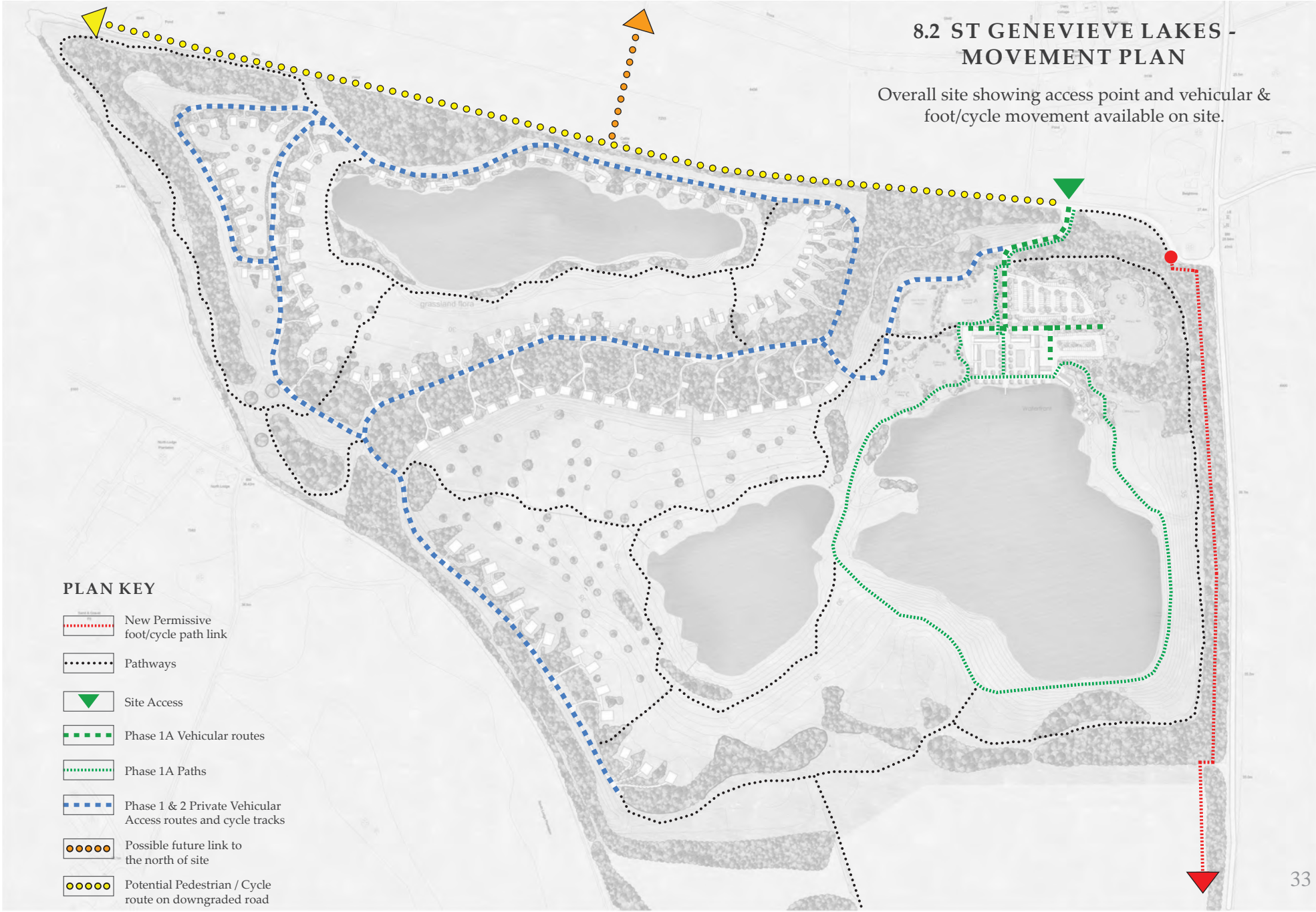
The range of spaces provided by the masterplan include more formal courtyards, public events spaces, gardens and naturalistic landscapes.

8.2 ST GENEVIEVE LAKES - MOVEMENT PLAN

Overall site showing access point and vehicular & foot/cycle movement available on site.

PLAN KEY

-  New Permissive foot/cycle path link
-  Pathways
-  Site Access
-  Phase 1A Vehicular routes
-  Phase 1A Paths
-  Phase 1 & 2 Private Vehicular Access routes and cycle tracks
-  Possible future link to the north of site
-  Potential Pedestrian / Cycle route on downgraded road





8.3 NEW PERMISSIVE FOOTPATH AND CYCLE ROUTE

The new permissive footpath / cycleway would run down the eastern edge of the site and allow people to access all the way down to the Fornham roundabout without having to walk or cycle on the A134 or B1106, (without having to visit the site's facilities). In addition to providing links to other facilities such as West Stow.

Footway and pedestrian crossing provision at the B1106 roundabout where the proposed on-site shared use route meets the highway.

“We would not want to encourage pedestrian or cyclists to use the A134 or the B1106 immediately south of the site (which do not benefit from footways). Therefore, the provision of a shared use route on the eastern/southern side of the site is very much welcomed.”

- *Highways Consultation on the Masterplan.*



8.4 JUNCTION AT THE A134

Appropriate signing is required to guide visitors along the most suitable routes from the A14 or A11 and ensure that they have sufficient warning of the access/route from the A134;

A number of measures can be put in place to ensure visitors take the most sensible route from the north and south, thereby protecting the Fornhams and other villages from site traffic. These measures could include signage on local roads, the A14 and site junction to help guide cars.

There is an opportunity to work with the Highway Authority to downgrade the C class public road running to the north of the site.

Visibility splays in line with vehicle speeds will be achieved at the access and any agreed visibility splays will be retained for that purpose.

8.5 IMPROVED BUS STOPS FOR THE SITE

There are bus stops close to the site access on the A134. A request to upgrade these (with raised kerbs, flag poles and shelters) could be made to improve sustainable links to the proposal and benefit other users and the local community.



8.6 SITE ACCESS AND VEHICLE ROUTES

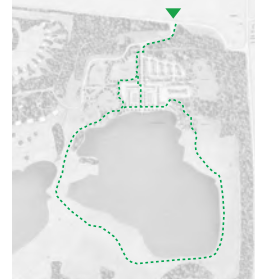
Vehicles would access and exit the site from the north east corner via the junction with the A134.

It would be desirable to have a single public vehicular access to the site, this would offer easy access to the heart of the Phase 1A development area.

Upon entering the site the vehicular traffic would be guided into the public areas of parking and camping accommodation or down a road to the west towards the holiday accommodation.

Sufficient parking and manoeuvring space would be provided on site in line with guidance: Suffolk Guidance for Parking (updated 2015)

Turning areas and parking would be provided for delivery vehicles and buses or coaches in line with guidance.



8.7 ADDITIONAL INTERNAL PERMISSIVE ROUTES

As part of Phase 1A, a new route would be set up around the main lake. This provides public enjoyment of the scenery whilst also establishing leisure access to the lake for fishing and other water activities. Access for members of the public to phases 1 & 2 will be restricted for biodiversity and conservation of habitats in these areas.

8.8 REFUSE & RECYCLING

Appropriate areas would be designated as refuse and recycling for the site as a whole including the buildings in Phase 1A and the Holiday Accommodation in Phases 1 & 2.

These designed features would include compost bins, water butts, litter and dog bins where required.

9

HYDROLOGY, ECOLOGY & BIODIVERSITY

9.3 PROTECTING THE BRECKS

Stone Curlew, Nightjars & Woodlark are three species that are under threat in the Brecks region. These are all Annex 1 Birds that are under the protection of European Commission Birds Directive, they are seen to be at risk due to changes in habitat. A principal driver for the development is to release tourist pressure away from the Brecks, thereby protecting the habitat of these three species.

9.2 WATER & FLOODING

Sustainable Urban Drainage Systems (SUDS) must also be used to ensure effective drainage of water on the site. This could include the use of some gravel rather than hardstanding internal roads to allow a more permeable surface for rainwater.

In larger areas of harder surface development, surface water runoff can be dealt with by the creation of planting areas within the landscape that can absorb surface water and utilizing the existing lakes as retention areas.

These strategies help to minimize the need for infrastructure whilst ensuring rainwater and runoff is not sent into the sewer system.



ST GENEVIEVE LAKES TODAY
View looking West across Phase 1A Amenity lake

9.3 ONGOING OBJECTIVES

The ongoing objectives of the management of the site are related to:

- Managing nature conservation areas
- Continue indigenous tree planting, with potential strategy to strengthen tree belts and create glade areas to encourage ground flora
- Maximise biodiversity in and around water bodies
- Management of low fertility grassland
- Low intensity grazing of rare breeds



NATURE CONSERVATION AND WILDFLOWERS

In the southern area of phase 1A / 2, an area of wildflower meadow planting is being managed.

In addition, over 40 acres of species rich grassland has been planted, this has been sown with wild flowers such as Yarrow, Red clover, meadow vetchling and Ox-eye daisys.



TREE PLANTING

Over 40,000 trees have been planted so far, Silver Birch, Field Maple, Oak, Ash, Crab Apple and Cherry are underplanted with Hawthorn, Hazel and Dogwood and Buckthorn, to provide a variety of habitats. Holly and Pine have been planted to provide evergreen colour.

All of these trees have been maintained with a five year programme to ensure proper establishment, any dead or damaged trees replaced and kept safe from Deer and Rabbits by robust fencing to ensure perfect growth.

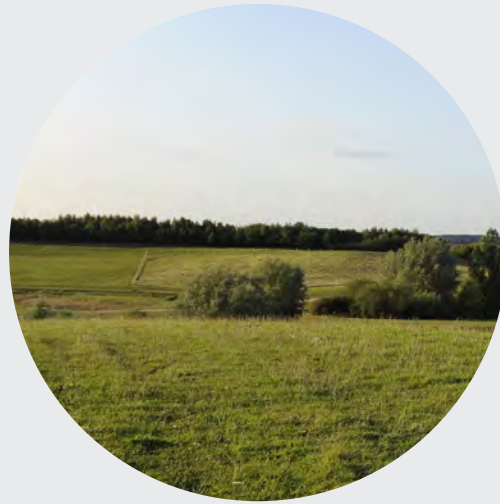


WATER BIODIVERSITY

Maximise biodiversity in water bodies, including reed planting in marginal aquatic areas to encourage bird species.

Lakeside reed beds have been established to create a habitat rich water's edge to provide cover for the many species that now live there, whilst the waters of the lakes have been stocked with Carp.

In the waterside area's Alder, Goat willow Grey Willow and Downy Birch have been planted.



WIDER GRASSLAND

Across the wider site plug planting along with recultivation and re-seeding will allow the wildflower grassland to spread.

The areas will be managed as hay meadow with short term grazing from summer to autumn.



RARE BREED GRAZING

As part of the Landscape for the Phase 2 lake area; parkland is being created using trees from a range of indigenous and exotic species mix these works commenced in 2015 and are ongoing.

It is intended these areas could be stocked with rare breed cattle or sheep.

10 SUSTAINABILITY & ENERGY

10.1 OVERALL ENERGY STRATEGY

Going forward, an energy strategy will assist Park Farm in creating a development with strong sustainable credentials, in turn also meeting local and national policy.

The energy strategy would start with first principles of :

1. Use less energy in building construction and usage
2. Use Renewable / low carbon energy.

10.2 SUSTAINABLE CONSTRUCTION

Even before the buildings are occupied, the construction and manufacture of the buildings can be tailored to remove embodied energy, in addition to off site construction methods to improve building detail quality.

10.3 SUSTAINABLE USAGE OF BUILDINGS

With the site's wide open spaces, buildings would enjoy excellent amounts of natural light and passive solar heating if glazed sensibly.

To use less energy, the buildings designed on site would incorporate design features to reduce the required energy to keep them operational, these could include smart use of super insulated building fabric, energy efficient lighting and 'A' rated appliances where possible.

Due to the nature of the holiday accommodation as intermittent short term usage over the course of the year, heating and cooling strategies would be designed to best suit this use.

As part of the energy strategy, understanding the energy demands on site will inform the energy supply method and reduce wasted energy before reaching the end user.

10.4 LOW CARBON ENERGY GENERATION

Due to the large number of proposed end users, district heating, cooling and electricity generation become potential strategies to assist in supplying energy on site.

10.5 ON SITE RENEWABLES

On proposed buildings, the appraisal of technologies such as photovoltaic panels (PV), solar water heating, Air Source Heat Pumps, (ASHPs) and Ground Source heat Pumps (GSHPs) may be appropriate.

10.6 CONSTRUCTION COMPOUND AFTER USE

In Phase 1A, The construction compound will be used for a number of years to allow the development to proceed in a phased manner without impacting uses already constructed. At the end of this time the construction compound may be used as a base to ensure ongoing upkeep of the landscape and buildings on site, or to allow an overflow of uses as required going forward.

10.7 SUSTAINABILITY OPPORTUNITIES

The site provides a destination accessible from Bury St Edmunds by walking and cycling. Although external links to surrounding villages are being encouraged, their prime function is to allow people from these areas to access the site, with the added bonus of providing sustainable links from the villages to the north, through the site to Bury St Edmunds.

The utilisation of existing infrastructure (roadways on site, concrete hard standing, electricity supply etc.) would cut down on the development required and thereby carbon footprint of the development.



THE MASTERPLAN

for St Genvieve Lakes, indicating how the development could look

11 CONCLUSIONS

11.1 FINAL THOUGHTS

This masterplan shows how the vision for the site can deliver a sustainable leisure destination for the area.

In addition to being supported by Policy RV6 and the Adopted Concept statement, the site has undergone extensive restoration to enable a leisure development to enjoy the site's landscape features.

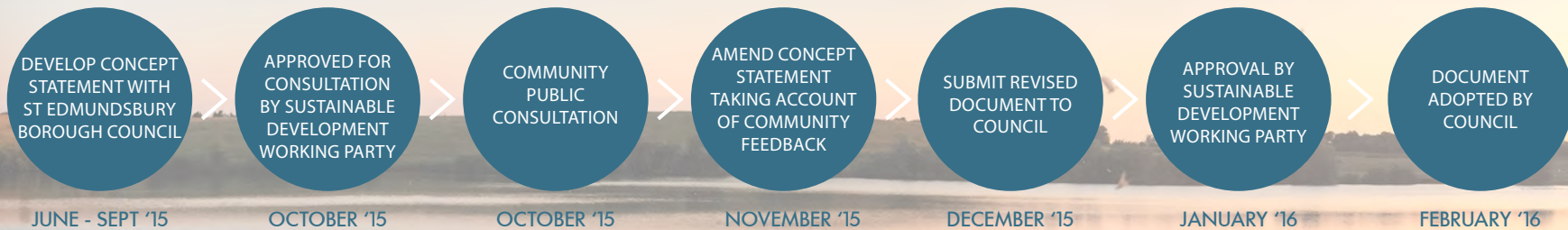
Access to the site is good both from surrounding communities and further a field, with the network of internal routes allowing enjoyment across a range of uses and visitor groups.

Whilst a great deal of time, effort and capital have been invested in the site to get it this far, the new proposed uses would assist the long term future for this site as a diverse wildlife haven for enjoyment by biodiversity and visitors alike for years to come.



11.2 STEPS GOING FORWARD

CONCEPT STATEMENT PROCESS



MASTERPLAN PROCESS



