



**GNLP Regulation 18 Consultation Response
March 2018**

**Land off Watton Road, Barford
GNLP0552**

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1. Executive Summary

This representation is prepared and submitted on behalf of Silfield Limited for a site on the western side of Barford for promotion as a residential development site which delivers a significant area of green infrastructure as part of the Greater Norwich Local Plan.

This submission builds upon the information that was submitted as part of the Call for Sites stage in July 2016. Since that time additional technical input has been undertaken to inform an updated indicative masterplan.

This site would be seeking to deliver a country park which could include new walkways, tree planting, play equipment and recreational spaces. New pedestrian links through the park will be designed to increase connectivity between the villages of Barford and Wrampingham. This area is in the region of 29ha. This is a significant public benefit which would deliver a piece of infrastructure which is in great demand in the Greater Norwich area.

The site has now been subject to a number of technical assessments and demonstrates that there are no fundamental constraints to the development of the site for residential and it is therefore considered SUITABLE for development.

2. Site Introduction and Description

Introduction

These representations are submitted on behalf of Silfield Limited who are the landowners of the site (GNLP0552).

The site was submitted to the 'Call for Sites' consultation which took place in July 2016. The site has been assessed as part of the Housing and Employment Land Availability Assessment (Dec 2017) which forms part of the evidence base of this current Regulation 18 consultation.

This submission has been informed by input from consultants on a number of technical aspects. A copy of the responses on technical matters can be found in Appendix 2.

The Site and Surroundings

The site is located on the northern and southern side of Watton Road, Barford. The site covers a total area of 37.39ha. Full extent of site is shown in Appendix 1.

The site is located to the west of Barford and is currently being used as agricultural land. The site is made up of a number of different fields. The field boundaries are made of a variation of hedgerows, trees and fencing. There are wooded areas within parts of the south east sections of the site. The site extends southwards to the River Tiffey.

The site itself is not covered by any national or local ecological or landscape designations, the site does abut the local River Valley landscape designation of South Norfolk Council.

There are no statutory sites within 2km of the site. There are a number of non-statutory sites which are within 2km of the site which consist of 10 County Wildlife Sites (CWS). One is within open countryside and the others are associated with the River Tiffey or River Valley bottoms. The closest is the Tiffey Woods CWS which is 115m upstream and consists of woodland and fen either side of the River Tiffey.

The site falls within the Mid Norfolk Natural Character area which is characterised as "*A rich agricultural area with small to medium scale fields and is mainly unwooded. Isolated farmstead and small nucleated villages with large medieval churches are linked by a dense network of lanes.*"

As identified within the Green Infrastructure Strategy which formed part of the evidence base of the Joint Core Strategy, the River Tiffey corridor runs alongside the sub-regional green infrastructure corridor of North West Norwich. This links Norwich- Wymondham- Attleborough- and Thetford.

The majority of the site is within Flood Zone 1. The south eastern corner, close to the River Tiffey, becomes Flood Zones 2 and 3. The areas within flood zone 3 are considered to be functional flood plain i.e within sub category Flood Zone 3b.

There are no listed buildings within the site but there are number within Barford. There is one listed building which adjoins the site boundaries which is Grade II listed Sayers Farmhouse (positioned centrally within the site).

The site does not contain any Public Rights of Way (PROW's).

3. Site Location

Please refer to Appendix 1

4. Site Opportunities

The site is in single ownership and is being promoted by the landowner Silfield Limited.

The development proposal for the site is for residential dwellings (circa 150 dwellings) which could include a mix of private, affordable and self-build/custom build properties and provision of a major new public park with landscape enhancements in the rural area around Barford.

As noted under the previous representations (Green Infrastructure Strategy) in July 2016 by Lanpro (please see Appendix 3) we have been working with a number of clients who have sites in and around the Norwich Policy Area (NPA) that can provide high quality green infrastructure corridors within easy access of growth locations and act as a benefit for shared developments. Further detail on this strategy can be found under questions 53 and 54 of this submission.

This site would be seeking to deliver a country park which could include new walkways, tree planting, play equipment and recreational spaces. New pedestrian links through the park will be designed to increase connectivity between the villages of Barford and Wramplingham. This area is in the region of 29ha.

An illustrative masterplan is submitted with this representation and can be found in Appendix 1. The illustrative masterplan demonstrates:

- A low-density housing development which would be a mixture of private and affordable dwellings and self-build properties;
- Delivery of significant areas of green infrastructure in the form of a country park and recreational play spaces which will be of benefit to the community of Barford and surrounding villages as well as the wider Greater Norwich; and
- Potential of new habitat creation and ecological enhancements.

Technical input has been sought in the preparation of this submission and these can be found in Appendix 2.

Ecology

A desk top study has been undertaken over the site and it establishes the baseline conditions of the site and the surrounding ecological context. It found that there have been a number of protected species and species of conservation found locally but none in any significant number that would restrict development of the site. It identifies that the main habitat related constraints to the site are likely to the boundary hedgerows and the bankside habitat along the River Tiffey. There are onsite ponds and woodland but none are shown to be Habitats of Principal Importance.

Any application for development of this site would be accompanied by the necessary Protected Species Surveys which would be undertaken during the appropriate survey windows and any subsequent development work would be subject to standard measures around timing of works to avoid nesting birds and prevention of water pollution etc. Given the land available within this site, the masterplanning of the development will incorporate mitigation to limit impacts from the built

environment in the vicinity of sensitive features such as the River Tiffey, retention of trees which may have bat roosting potential.

As noted above, a sub-regional green infrastructure corridor runs along the corridor of the River Tiffey. Site landscaping could contribute to this corridor by providing enhanced bankside habitat and also by creating semi-natural habitat within this broader corridor. This would increase the extent of habitat in absolute terms and also support the role of this corridor as a link across the landscape. These enhancement measures will also be relevant to the Claylands Living Landscape.

Thus, soft landscaping is potentially an appropriate Site enhancement, using appropriate native species and species of known wildlife value. Key points for many species groups is the need for insect prey, for bats and also for the chicks and fledglings of many birds. Thus, a range of native plant types should be planted to provide a range of resources across the seasons from spring to autumn (insects and their predators), and also fruit and berry producing species in autumn and winter (birds). Such planting will also be of direct value to the widespread declining moths that are known locally.

For grassland creation and within any SUDS features, a number of wildflower seed mixes are available from commercial suppliers, including wetland and pond planting (e.g. Emorsgate EM8 meadow mixture for wetlands), wildflower swards (e.g. EM4 meadow mixture and EM10 tussock mixture) and flowering lawns for areas with more intensive use and management (e.g. EL1 flowering lawn mixture).

Additional measures of likely value would be bird and bat boxes, habitat piles, and allowing continued movements of hedgehogs across the Site with measures such as access holes within garden fences.

Landscape

The design of the site seeks to integrate the proposed development into the wider landscape by retaining and enhancing landscape features typical of the patterns found in the local landscape as identified in the in the Mid Norfolk National Character Profile Area¹ and the South Norfolk Council Yare / Tiffey Rural River Valley Landscape Character Assessment (LCA)^{2,3}.

Within Barford and the surrounding area, the landscape is defined by the valley landform of the River Tiffey with its tranquil rural character with strong visual diversity created by the contrast between open areas and more wooded intimate areas. Low grade agricultural soils give rise to pastoral land uses along the river banks which are typified by grazed damp hummocky pastureland. These are interspersed with a patchwork of small valleyside woodland blocks. The settlement pattern of the area consists of small scale settlements clustered around fording points or focussed at the base of the valley sides and along a network of country lanes with distinct gaps and open landscape views maintained between settlements.

The outline concept design of the site has three main objectives;

1. To minimise views of the proposed development from the wider landscape by creating woodland belts

2. To retain and provide ecological enhancements to the flood plain pasture within the Sub Regional Green Infrastructure corridor along the western bank of the River Tiffey
3. To provide new areas of low-maintenance, publicly accessible parkland and amenity areas with integrated sustainable drainage features to benefit local residents (existing and proposed) and wildlife

The landscape setting of the proposed development creates a pattern of more formally landscaped areas to the north around the proposed build development. These create a cared-for landscape setting for the proposed dwellings and could provide community amenity areas such as open grass areas for ball games and frizbee, equipped play areas, allotments and community orchards. It is proposed that these graduate into informal, rural open spaces in the south, each with its own character to maintain the visual diversity typical of the area and to provide a mosaic of habitat types to increase ecological diversity. This area could include wet and dry meadow, woodland and seasonally grazed tussocky wet meadow with permanent and ephemeral ponds within the functional flood plain of the Tiffey.

This series of green spaces along a north-south axis would allow the creation of a sustainable drainage systems infrastructure which utilises the naturally falling contours of the land to move surface water through a SUDs chain arising in the developed area to the north and culminating in the area of hummocky pastureland adjoining the River Tiffey along its western bank. This could allow the creation of a series of ponds and pools in this area that would create ecological enhancements within the Sub Regional GI corridor, capitalising on a key landscape enhancement opportunity as identified by the 2001 South Norfolk LCA of 'river management to repair and encourage the development of diverse wetland ecosystems.'

A main circular walking and cycle path linked to proposed residential areas could connect the new and existing residents to community facilities and amenity areas, passing through meadow, woodland and wetlands where there are opportunities for informal exercise and recreation such as walking, running and dog walking. Informal 'desire line' paths could be allowed to be created off this to create an informal network of low-impact access paths within a low-maintenance, naturalistic landscape.

Areas of woodland planting could extend existing woodland and provide 'stepping stone' patches to create corridors for the movement of wildlife linked to Tiffey Woods County Wildlife Site. To the north-west woodland belts could be planted to screen the built edge from view within the wider landscape and to create a shelter within the development from the prevailing south westerly wind.

Heritage

The site does not contain any designated heritage assets, however, there are 16 listed buildings and one conservation area within 1km of the site.

Ten of the sixteen listed buildings, plus the conservation area, are located to the south of the site and are unlikely to be sensitive to development proposals which is restricted to the north of the site. Three further listed buildings are located within the historic core of Barford and are well

screened from the proposed development site by existing development and are, therefore, not considered sensitive to proposed development.

Therefore, the designated heritage assets considered to be potentially sensitive to development proposals are restricted to the Grade II* Church of St Botolph (NHLE 1050737), and the Grade II listed War Memorial at St Botolphs (NHLE 1446034) and Sayers Farm House (NHLE 1373036).

In relation to archaeology, the parish has been extensively fieldwalked and surveyed by metal detector. These activities have yielded Roman coins and pottery as evidence of the Roman occupation and Saxon brooches and pottery as evidence of continuing habitation.

The Norfolk Historic Environment Record has not yet been consulted for full details of recorded archaeology within, and in the vicinity of, the site. However, the online Norfolk Heritage Explorer does not record any known monuments or findspots within the site.

Any application for development of this site would be accompanied by a Heritage Statement and an Archaeological Desk Based Assessment and or geophysical survey (where built development is proposed).

Given the land that is available within this site there is ample opportunity to ensure that sufficient separation is created from the built development and any areas that may be identified as being sensitive in relation to heritage and/or archaeology.

Flood Risk and Drainage

The closest main River to the site is the River Tiffey which forms the eastern boundary of the development area flowing north where it meets the River Yare to the north east of Barford. The River Tiffey is an Environment Agency (EA) maintained Main River. Examining the EA's published online flood maps reveals that part of the development area is within Flood Zone 2 (Medium Risk) & Flood Zone 3 (High Risk). These flood areas are constrained to the eastern side of the development area. The areas within Flood Zone 3 are likely to be considered functional flood plain i.e. within the sub category Flood Zone 3b. Most of the site however falls within Flood Zone 1 (Low Risk). The predicted Flood Zone 2 & 3 flood extents do not affect the existing residential areas within the overall development area.

On comparison with the proposed development layout plan, the areas to the east of the site within Flood Zones 2 & 3 have been allocated as green infrastructure i.e. parks, public open spaces, wetlands etc. Under Table 2 the NPPF flood risk guidance, this proposed type of land use (green infrastructure) is classified as "water compatible development" and therefore subject to the appropriate detailed design will not increase flood risk in the local area or any developed area within the overall development boundary.

The residential areas have been proposed in the western and northern areas of the site which is within Flood Zone 1 and therefore at low risk of flooding from the River Tiffey. The residential area of the development will be designed to the latest national and local guidance regarding surface water management & run off and will incorporate SUDS to replicate the existing greenfield conditions. Replicating greenfield run off rates and using source control SUDS techniques will ensure that the development does not increase flood risk within the new

development area or outside of the site boundary. Reviewing the British Geological Society online published records it would appear that some areas of the site may be suitable for infiltration drainage techniques due to the presence of sands & gravels beneath the surface. However, this will need to be assessed further with an intrusive site investigation.

Any application would be accompanied by a full Flood Risk Assessment and Drainage Strategy.

Transport

Barford has a good road link via the B1108 to Norwich 13km to the east and links via mainly unclassified roads to Wymondham 6km to the south. It also has a peak-time public transport service to and from Norwich with services also running on Sundays and bank holidays. This is served by Konect Bus.

The full traffic impact and access arrangements will be carried out in due course, but initial access arrangements were submitted with the previous representation in July 2016 (copy included within Appendix 1) and suggests three points of access from the Watton Road. The number of accesses needed for a development of over 100 is two. Then an additional access point for a car park which would be used for visitors to the green infrastructure areas.

5. Consultation Questions

**answer/delete when appropriate

Section 3 – The Vision and Objectives for Greater Norwich

1. Do you agree with the draft version and objectives for the plan below?

Yes, we broadly agree with the vision and objectives for Greater Norwich to 2036 as set out at Figure 1, subject to our more detailed representations on specific issues below.

Section 4 – The Strategy

Delivering jobs, homes and infrastructure

2. Do you support the broad strategic approach to delivering jobs, homes and infrastructure set out in paragraphs 4.1-4.7?

The Greater Norwich Local Plan is an opportunity to build on the significant existing attributes of the wider Norwich area a hub for investment, commercial activity and high- quality place making, which will be of benefit to all who live and work there.

We welcome the joint working of the different authorities, who will lead the planning process for this Plan, in our view to take the required strategic view essential to the future prosperity of the Greater Norwich area.

The Greater Norwich area is currently in a unique position, where there is a recognition that growth is needed and a need for investment particularly on key infrastructure. This provides a clear opportunity for areas, particularly around the A11 corridor, a key role in delivering new settlements, sustainable developments and key infrastructure (including green infrastructure).

There is a need for the Greater Norwich area to benefit from the economic growth in the Cambridge area. Greater Norwich, at the very least, must protect its economic position and not get left behind.

There is a recognition in the Regulation 18 consultation of the positive attributes of the Greater Norwich area, which are supported. However, to ensure a bright and prosperous future an ambitious strategy is essential, which also respect existing key characteristics.

We have serious concerns regarding the calculation proposed in the Regulation 18 consultation of the overall housing requirement for the plan period as set out in our answer to Question 4 below. The favoured option must be to deliver forecast jobs growth plus additional growth. We are of the view that a realistic assessment of the requirement would lead to a figure of between 11,000-14,000 new homes in the Plan period to 2036 in order to deliver the City Deals aspirations.

It is our submission that a new settlement in the Cambridge-Norwich Tech Corridor sitting alongside a range of smaller sites to be apportioned and located as set out in our response to Question 9 (including site GNLP0552) is the right approach to ensure a choice of sustainable sites

which will facilitate delivery of required housing numbers and infrastructure within the Plan Period up to 2036. Allocation of this site at Barford should form part of that strategy.

Job Targets

3. Which option do you support for jobs growth? (refers to options on pg.28)

There is a recognition in the Regulation 18 consultation of the positive attributes of the Greater Norwich area, which are supported, however to ensure a bright and prosperous future an ambitious strategy is essential, which also respects existing key characteristics.

The Greater Norwich Local Plan is an opportunity to build on the significant existing attributes the area has to make the wider Norwich area a hub for investment, commercial activity and high-quality place making. This will be of benefit to all who live and work there.

The favoured option must, therefore, be to deliver forecast jobs growth plus additional growth (Option JT1).

Calculating the Housing Numbers for the Plan

4. Do you agree that the OAN for 2017-2036 is around 39,000 homes?

We broadly support Growth Option 3 to support the Cambridge- Norwich hi-tech corridor. However, the overall housing requirement number of 7,200 dwellings derived from an OAN of around 39,000 is not supported and is considered to be too low.

The GNDP's 2016 call for sites consultation indicated that sites for around 12,000 new homes were needed. Lanpro are surprised that this has reduced so significantly to 7200 in this current consultation. Lanpro do not consider this figure is sufficient to meet the housing requirement for Greater Norwich for the period to 2036.

Currently we do not support the use of the Government's proposed methodology for the calculation of OAN as set out in the consultation paper 'Planning for the Right Homes in the Right Places'. The methodology is still at the consultation stage and has been subject to a significant number of representations objecting to various aspects of the proposed calculation e.g. from the Planning Officers Society, Homebuilders Federation and the RTPI. The proposed methodology fails to consider economic objectives. There is no certainty that this methodology will come into effect, either in its current form, or at all and therefore cannot be relied upon.

We do not support the figure of 7,200 homes arising from the use of the draft Government methodology for the calculation of housing numbers. Para 4.17 of the Growth Options document states that the OAN figure for Greater Norwich is 38,988 dwellings for 2017 - 2036 based upon this methodology. This figure should be used with caution because it uses figures taken from the 'Application of proposed formula for assessing housing need, with contextual data' table that accompanies the Government Consultation document. This is an indicative assessment of

required dwellings per annum based upon a draft formula for the period 2016-2026, rather than for the period 2017 -2036. Furthermore, it fails to consider economic objectives for the area.

The calculation of the OAN should in any event be only a starting point for calculating housing numbers for the plan. The Government OAN figure does not include the housing numbers necessary to deliver economic objectives via the City Deal which has been agreed with Central Government in order to help turn knowledge into growth and 13,000 additional jobs'. Delivery of these objectives is necessary to ensure that the area is eligible to receive the related Government funding for infrastructure and business support, enterprise and innovation. We consider that it is important that the City Deal requirements are included as they have already been committed to and will contribute to the Greater Norwich and wider economy.

Plan makers are entitled to utilise different methods of assessing need to the Government's draft methodology and if these produce figures that are higher, the Government proposes that Inspectors should consider such approaches sound unless there are compelling reasons to indicate otherwise. Therefore, where it is sensible to propose higher figures based on employment growth or higher affordable housing needs there is scope to do this and the "significant contribution" that Government sees the City Deal making "to the recovery and future growth of the UK economy" (source: Greater Norwich City Deal) is valid justification for this.

Furthermore, paragraph 158 of the NPPF requires that Local Plans should ensure that strategies for housing and employment set out in their plans are integrated and take full account of relevant market and economic signals. Not to include the City Deal requirements would be a failure to meet this requirement.

If the City Deal housing requirements are added to the Government OAN figures the housing requirement for the period 2017-2036 should be as follows:

Government OAN figure 2017-2036:	38,988
Minus commitments of:	35,665
Sub Total:	3,323
Plus, City Deal Housing Requirement from 2017 SHMA (SHMA fig:101)	8,361
Subtotal:	11,684
Plus 20% buffer (see qu6 reasoning below):	2337
TOTAL HOUSING REQUIREMENT (2017-2036):	14,021

We consider that the up to date Strategic Housing Market Assessment June 2017 figures for the calculation of the housing requirement should be used until the Government’s methodology is formally put into practice. The SHMA sets out a Policy on full objectively assessed need for housing for the period 2015-36 for the Greater Norwich Area of 44,714 **including** the City Deal housing requirement (Figure 96: Central Norfolk Strategic Housing Market Assessment 2017). This would indicate a residual requirement of 10,859 homes 2015-2036 taking into account a 20% buffer:

Policy-on SHMA OAN figure including City Deal:	44,714
Minus commitments of:	35,665
Subtotal:	9,049
Plus 20% buffer (see qu6 reasoning):	1810
TOTAL HOUSING REQUIREMENT (2015-2036):	10,859

Paragraph 5.7 of the SHMA states:

” We would note that in the Central Norfolk SHMA 2015, the potential impact of the City Deal was considered part of the OAN, but greater clarity now indicates that it is an aspirational jobs target which **should be treated as part of the housing requirement** (our emphasis), not the OAN.”

It is important that the City Deal requirements are not ignored and are included in the final housing requirement figure as they have already been committed to and will contribute to the Greater Norwich and wider economy. This should be the case whether the Government or SHMA OAN methodology is used.

Both scenarios suggest that the housing requirement to 2036 should be significantly **higher** than the 7200 homes specified in the Growth Options Document and a figure in the range of 11,000 to 14,000 would be more appropriate.

We note that the Growth Options Document is unclear about the proposed base date of the plan and we consider that clarity on this is required once the OAN methodology is confirmed.

Rebasing the start date of the Local Plan to 2017, should not be used as an excuse to reduce previous backlog. Both above methodologies are set to different plan start dates, but both are intended to take into account previous backlog in assessing the housing requirement going forward.

We would also question the deliverability of some of the existing 35,665 housing commitments. Further consideration should be given to these sites to ensure that it is a robust figure to use in the calculation of the housing requirement.

5. Do you agree that the plan should provide for a 10% delivery buffer and allocate additional sites for around 7,200 homes?

The figure of 7,200 homes is considered to be too low for the reasons set out above and because a 10% delivery buffer is too low. This is particularly the case bearing in mind the track record of persistent under delivery of housing within the Norwich Policy Area since the adoption of the current Joint Core Strategy. This has necessitated the addition of a 20% buffer to the calculation of five-year supply of housing land in the Norwich Policy Area. Whichever of the 6 growth options, or variations on them is finally chosen, it is likely that the vast majority of housing will be allocated in locations in and around Norwich because this is a sustainable model for future growth. All of the growth options show over 70% of housing to be located within the Norwich Policy Area. We consider that in order to ensure competition and choice in the availability of housing land and reduce the future likelihood of lack of 5-year supply, a 20% buffer should be added to the OAN figures for the purposes of calculating the housing requirement. Windfalls should not be relied upon to make up any shortfalls. (see question 6 for more information).

6. Do you agree that windfall development should be in addition to the 7,200 homes?

Paragraph 4.24 of the plan states that “based upon current trends and projected future delivery, it is estimated that an additional supply of up to 5,600 dwellings could be provided during the plan period on “windfall” sites. This is likely to be an over estimate. Recent trends have been very much influenced by the lack of 5-year housing land supply within the Norwich Policy Area. If during the new plan period there is no longer a shortage of 5-year land supply, then the amount of delivery on windfall sites will be significantly reduced.

Windfall development in recent years has also been dependent upon the availability of unallocated brownfield sites within the City and other towns becoming available. Due to the emphasis on brownfield development in recent years it is considered that the availability of this source of windfall is also likely to be reduced during the Plan Period up to 2036. Therefore, the Plan should not be reliant upon significant amounts of windfall coming forward within the Plan Period to deliver the required housing numbers. Windfall should be in addition to the final housing requirement number chosen.

Delivering Infrastructure

7. Are there any infrastructure requirements needed to support the overall scale of growth?

Inevitably with any significant housing and employment growth there will be supporting infrastructure requirements. It is essential that these are properly planned for at the outset. The opening of the NDR will help to facilitate growth to the east and north of the city. It is also likely that improvements will be required to A47 southern bypass junctions, e.g. Thickthorn, Longwater to ensure sufficient capacity. Opportunities for better public transport linkages including rail and bus also need to be properly considered.

We also consider that it is essential that healthcare requirements are properly assessed and planned for at an early stage. This requires proper engagement with, and input to, the process of plan making from the NHS to ensure that health facilities are not left over to be provided on a site by site basis. This only serves to fuel local opposition to new development. We consider that, where appropriate, there should be a commitment towards using New Homes Bonus generated by new developments to help fund Healthcare facilities where there may be funding shortfalls. Furthermore, specific healthcare priorities should be identified for funding through the Greater Norwich Growth Programme (Infrastructure Plan) funded by CIL.

How should Greater Norwich grow?

Existing Housing Commitment

8. Is there any evidence that the existing housing commitment will not be delivered by 2036?

The existing housing commitment, which comprises allocations in the Joint Core Strategy (JCS) and sites with planning permission, is substantial at 35,665 homes. There has been a track record of persistent under delivery of housing within the Norwich Policy Area since the adoption of the current JCS. This has necessitated the addition of a 20% buffer to the calculation of five-year supply of housing land in the Norwich Policy Area. Although at this stage we are not aware of any hard evidence that the commitment will not be delivered by 2036, we do believe that it should be treated with caution and it is therefore essential that an adequate buffer is added to the housing requirement figure in order to mitigate both under delivery of the commitment and of new allocations.

The Growth Options (options on pg.39-40)

9. Which alternative or alternatives do you favour?

We broadly support Option 3 ‘Supporting the Cambridge to Norwich Hi-Tech Corridor’ with some variations. These variations relate to the overall level of housing proposed, which we consider should be within the region of 11,000 – 14,000 new homes rather than the 7,200 set out within

the Growth Options Document. The reasons for the additional requirement are set out in our answers to questions 4-6 above.

In order to accommodate the additional numbers, Growth Option 3 should be amended as follows:

- Provision of circa – 2000 units to a new settlement within the Plan Period (more to follow post 2036)
 - Allocation of additional brownfield sites within Norwich City if available options can be identified.
 - Allocation of additional numbers (circa 1000 units) to the north-east on small/medium sites to provide short term delivery in this area which will supplement larger growth triangle sites where delivery rates have been slow to date and to help provide City Deal housing requirement in association with employment growth around the airport.
 - Any remaining requirement to be split proportionally between other locations identified under option 3.
1. Option 3 provides the opportunity to focus significant growth in an area which could create an extension of the Cambridge, Milton Keynes, Oxford corridor, which will be the subject of significant investment. In order to compete effectively with and benefit from the Cambridge regional growth, this option is essential.
 2. Growth Options 1-3 have been scored the same within the Interim Sustainability Appraisal and perform significantly better in sustainability terms than options 4 -6. Options 4-6 should be discounted as least sustainable. The provision of adequate infrastructure and services to support new housing is extremely difficult under dispersal options and the increased level of public opposition to numerous dispersed sites that may not be properly served by infrastructure and services should not be under-estimated. This is not to say that there should be no dispersal, however. Where smaller sites in towns and villages can bring community benefit or help the viability of existing services and facilities, this should be supported. We consider that option 3 provides the right level of dispersal without making this the focus of the growth strategy.

Option 1, (concentration close to Norwich) obviously scores well in sustainability terms but is very much a repeat of the existing Joint Core Strategy. There have been significant issues with delivery of the JCS numbers, particularly in certain areas and a repeat of this is not a desirable outcome. To accommodate the majority of the required housing numbers within an option 1 scenario would require significant additional pressure being placed upon Norwich Policy Area towns and villages, and the urban fringe, that are already experiencing high levels of growth under the JCS. As our evidence suggests that in the region of 11,000-14,000 new homes are required rather than the 7200 specified in the Growth Options Document, there is a need to find sites for significantly more homes than currently presented under this option. Although there may be scope to find some more suitable brownfield sites within Norwich, it is not considered that there is sufficient

capacity under this option to accommodate all of the growth requirement without having an adverse impact upon the character of fringe settlements, as well as increased pressure on infrastructure and services.

3. The additional benefit of Option 3 is that as well as directing significant growth to a corridor that can bring valuable benefits in terms of Hi -Tech job creation, the development of a new settlement based upon garden village principles will have less impact upon existing towns and villages than too many bolt on urban extensions that do not always provide the required level of infrastructure and facilities.
4. We consider that the 11,000-14000 homes required would be best accommodated by growth Option 3 that provides for a new settlement in the right location to help deliver on economic growth objectives as well as providing a sustainable level of additional growth to Norwich, its fringe settlements and other main towns and villages.
5. We understand that there may be some nervousness regarding the ability to realise the delivery of a new settlement to garden village principles under this Growth Option bearing in mind that this would be a new approach in this area. However, we believe an ambitious strategy is necessary to ensure a prosperous future for the area, which also respects the key characteristics of Greater Norwich. Promotion of a new settlement offers a high level of local authority engagement in the development process to ensure that there is the correct framework in place for long term investment for required infrastructure and to ensure that the completed development is vested with the local community and there is sufficient long-term income flow to ensure long-term stewardship. We believe that this is a deliverable model.

10. Do you know of any infrastructure constraints associated with any of the growth options?

As set out in our answer to Question 7, with any significant housing and employment growth there will be requirements for supporting infrastructure. It is essential that these are properly planned for at the outset.

When reviewing the 6 growth options, the delivery of infrastructure by dispersal options becomes difficult. We believe that dispersal Options 4, 5 and 6 provide significantly more constraints than Options 1-3.

As such, other than meeting specific local needs, dispersal should only be supported for a proportion of the growth, but not the main strategic focus. New settlement planning, can ensure that there is a planned approach for infrastructure, linking into various funding streams and provide greater control over housing trajectories.

11. Are there any other strategic growth options that should be considered?

12. Do you support the long-term development of a new settlement or settlements?
Green Belt
13. Do you support the establishment of a Green Belt? If you do, what are the relevant “exceptional circumstances”, which areas should be included, and which areas should be identified for growth up to and beyond 2036?
<p>We do not support the establishment of a Green Belt. This would only serve to push the required housing numbers further into the countryside in order to achieve a protected area around Norwich. This would be unsustainable because it would increase the length and number of journeys into the city and would be likely to have a greater environmental impact on countryside locations.</p>
Norwich City Centre Defining the City Centre Area
14. Should the area defined as the city centre be extended?
N/A to this submission
Strategic City Centre Policy
15. Do you support the approach to strategic planning for the city centre in 4.80 above?
N/A to this submission
City Centre Offices
16. What should the plan do to reduce office losses and promote new office development in the city centre?
N/A to this submission
Retailing
17. What should the plan do to promote retailing in the city centre?
N/A to this submission
Leisure and Late Night Activity Zone
18. Should the focus for late night activities remain at Riverside, Prince of Wales Road, and Tombland, or should a more flexible approach be taken?

N/A to this submission
City Centre Housing
19. What should the plan do to promote housing development in the city centre? N/A to this submission
Cultural, Visitor and Education Facilities
20. How can the plan best support cultural, visitor and educational uses in the city centre? N/A to this submission
Remainder of the Norwich Urban Area and the Fringe Parishes
21. Do you support Option UA1 for the remainder of the urban area and the fringe parishes? N/A to this submission
Main Towns
22. Do you know of any specific issues and supporting evidence that will influence further growth in the Main Towns? N/A to this submission
Settlement Hierarchy
23. Do you agree with the approach to the top three tiers of the hierarchy? Yes, this is supported.
24. Do you favour option SH1, and are the villages shown in appendix 3 correctly placed? Lanpro favours option SH1 which promotes the continuation of the current approach i.e the level of growth that is to be apportioned to different settlements should respond to their scale and their number and range of services.

Lanpro is supportive of the recognition given to the roles played by Key Service Centres and Services Villages (which includes the village of Barford) in the settlement hierarchy within paragraphs 4.113 and 4.114 of the Growth Options Document.

We agree that growth should be apportioned to these settlements in accordance with their position within the settlement hierarchy and with the aim of promoting sustainable forms of development.

It is acknowledged that in some rural areas, villages may share services and that through doing so, may be considered sustainable places for growth.

25. Do you favour the Village Cluster approach in option SH2?

Based on the current level of information available in this consultation, Lanpro do not support the village cluster approach set out in option SH2 of the Growth Options Document for the following reasons, but are not limited to.

Grouping Service Villages such as Barford with other smaller villages and rural communities will, in our view, result in providing communities with less certainty over where development may go and it could push development to rural villages which would be considered the least sustainable locations.

Lanpro recommend that the existing 6 tier hierarchy be retained (as per Option SH1 of the Growth Options Document) but suggest that it would be appropriate for strategic policies relating to the distribution of new housing within the Local Plan to make reference to the inter-dependency of lower tier settlements.

A settlement's sustainability and appropriateness to accommodate growth as a result of either, its own service provision, or its reliance upon services located within other settlements, should be considered within the Local Plan's Sustainability Appraisal and the results reflected through the allocation of specific housing sites.

As noted above, this view is based on the current level of information available on this matter, if subsequent evidence is provided during later stages of consultation we will provide information at the relevant stage.

25a. What criteria should be used to define clusters?

25b. Which specific villages could form clusters?

25c. How could growth be allocated between villages within a cluster?
The Influence of the Norwich Urban Area
26. Do you support a Norwich centred policy area and, if so, why and on what boundaries?
Section 6 – Topic Policies The Economy The Supply of Employment Land
27. What option or options do you support? (refers to options on pg.71-2) N/A to this submission
28. Which allocated or existing employment sites should be identified as strategic sites and protected? N/A to this submission
29. Are there employment areas that should be identified as suitable for release for residential uses? N/A to this submission
30. Are there any new employment sites that should be allocated? N/A to this submission
Accommodating Expenditure Growth
31. Should the position of any of the centres in the retail hierarchy be changed? N/A to this submission
32. Do any of the existing retail centres have scope to expand to accommodate further floorspace?

N/A to this submission
The Rural Economy
33. What measures could the GNLP introduce to boost the rural economy?
N/A to this submission
Access and Transportation
Strategic Transport Issues
34. Are there any other specific strategic transport improvements the GNLP should support?
N/A to this submission
Promoting Healthier Lifestyles, Sustainable Travel Choices and Greater Accessibility to Broadband
35. Are there other measures that the GNLP can promote to support improved sustainable transport and broadband and mobile networks across the plan area?
N/A to this submission
Design
Options
36. What approach do you support for promoting good design of new development?
<p>We consider that Option DE1 to broadly continue with the existing design and density policy approaches with some relatively minor changes and updating is appropriate at this time. It is still too early to be sure what any changes to the NPPF will contain. This approach will support good design. Setting more prescriptive design and density policies is likely to be difficult to achieve across such a large and diverse area and should be approached with caution. Setting a policy that satisfactorily deals with City Centre apartment sites as well as rural infill sites both in terms of density and design may create more problems than it solves. We consider that a broad policy is more appropriate and that individual site allocation policies could set more prescriptive site-specific requirements if relevant. This would then be supported by Development Management Policies in each of the Districts and the City.</p>

Housing

Minimum Affordable Housing Threshold

37. Which approach to affordable housing thresholds do you prefer?

We favour option AH2 which requires only affordable housing on sites of 11 or more dwellings in line with current and expected Government guidance. We object to option AH1 for the same reason.

Application of Affordable Housing Percentage Requirements on Sites

38. What approach do you favour for affordable housing percentages? (refers to options on pg.87)

We favour a hybrid approach (an amalgamation of AH3 and AH5) that allows for a viability assessment of larger sites to arrive at a deliverable affordable housing figure and a fixed percentage in smaller traditional housing sites (where overall viability will be easier to predict) delivering more than 11 dwellings. This will maximise housing delivery whilst also encouraging the developers of larger sites where infrastructure, finance and phasing costs are higher to deliver.

The obvious problem in the calculations used is that the 2017 SHMA conclusion figure is far too low as it makes no provision for the backlog over the JCS Plan period pre-2015; or the City Deal housing numbers that remain an unmet housing commitment agreed with Central Government and now seem to have been lost in the current calculations.

Tenure Split for Affordable Housing

39. Do you support the favoured option for tenure split?

We object to the current one-size-fits-all approach to housing tenure types and split as advocated under option AH6. The split needs to be informed by current and future local housing needs and investment strategies.

Rural Windfall, Exception Sites and Small Sites

40. Which approach do you think should be taken to rural windfall and exceptions sites? (refers to options on pg.89-90)

We consider that Option AH7 to allow small scale windfall sites adjacent to settlements with development boundaries is appropriate. These sites should be subject to a criteria-based policy to ensure that they are only permitted where they are acceptable in terms of impact on form and character, landscape setting of the village and are immediately adjacent to settlement boundaries.

Housing Mix – Relative Ratios of House Sizes by Bedrooms
<p>41. Which approach to the mix of housing do you support? (refers to options on pg.92)</p> <p>We support option AH10 and object to option AH9 as described on the basis that the market will always dictate housing mix delivery based on a known existing demand in each District. Any attempt to apply a blanket housing mix across the entire GNLP area will only serve to frustrate housing delivery and repeat the mistakes of the past that have resulted in missed housing targets and a rolled-up housing need.</p>
Housing with Care, Extra-Care Housing and Retirement Housing
<p>42. Which approach or approaches to housing for older people and care accommodation do you favour?</p> <p>N/A to this submission</p>
Houseboats
<p>43. Which of the reasonable alternatives for houseboats do you favour?</p> <p>N/A to this submission</p>
Gypsies and Travellers
<p>44. Which policy approach do you favour to planning for the needs of Gypsies and Travellers?</p> <p>N/A to this submission</p>
<p>45. Are there any suitable sites for Gypsy and Traveller accommodation you wish to submit?</p> <p>N/A to this submission</p>
Travelling Showpeople
<p>46. Do you support the favoured option for planning for the needs of Travelling Showpeople?</p> <p>N/A to this submission</p>

47. Are there any suitable sites for Travelling Showpeople accommodation you wish to submit?

N/A to this submission

Residential Caravans/Park Homes

48. Do you support the favoured option for residential caravans and park homes?

N/A to this submission

49. Are there any potential locations for new/expanded residential caravan sites that you wish to propose?

N/A to this submission

Climate Change

50. Do you support the favoured option for climate change policy?

N/A to this submission

Air Quality

How Should Air Quality be Covered in the GNLP?

51. Which approach do you favour for air quality? (refers to options on pg.104-5)

N/A to this submission

Flooding

How Should Flooding and Flood Risk be Covered in the GNLP?

52. Do you support the favoured option for flood risk policy?

N/A to this submission

Nature Conservation, Green Infrastructure and Habitats Regulation Assessment Mitigation

How Should Nature Conservation and Green Infrastructure be Covered in the GNLP?

53. Which option do you support? (refers to options on pg.111)

Lanpro supports a variation of option NC1 where specific housing, employment and new settlement sites are chosen to deliver large areas of strategic green infrastructure. Lanpro

considers that a network of new large green spaces including Country Parks linked to development is the appropriate strategy. This site in Barford could be part of that network (for full details of the proposal please refer to Question 4).

Lanpro considers that the blanket application of option NC1 as an enlarged fixed open space requirement to be delivered on all new housing sites regardless of location, context, scale and viability will not deliver the quantum of strategic green infrastructure needed to meet existing shortfalls or offset the impact of planned new housing growth on the Natura 2000 sites (including the Norfolk and Suffolk Broads) quickly enough. This over-and-above requirement will only serve to frustrate development on viability grounds. Furthermore, this new dispersed network of extra green space on housing sites will also not be sufficiently attractive to mitigate against the inevitable recreational impacts of new growth on the North Norfolk Coast SAC, SPA and Ramsar, The Broads SPA and Broadland SPA and Ramsar. This is evident through the on-going application of a similar extra green space policy in Broadland District Council area that is doing very little to meet overall open space targets/existing deficiencies within the Norwich Policy Area.

We further consider that the pooling of offsite payments as proposed under option NC2 will also not work for the same reasons. The problem being that land on the edge of existing urban areas where sustainable growth is being focused has clear hope value and is therefore typically not for sale for low-value open space and recreation uses.

The clear and obvious way forward is to select specific housing sites as a focus for growth around the City of Norwich that are sufficiently large to accommodate this shortfall and open space requirement and to make open space delivery (quantum, type, equipment required and phasing) a requirement of the allocation. I would direct you to my clients' previous representations submitted in response to the previous call-for-sites and the accompanying Supporting Representation document entitled Green Infrastructure Strategy dated July 2016 that outlines a comprehensive delivery strategy.

54. Do you think any changes should be made to the Green Infrastructure network?

In line with Lanpro's previous representations we consider that changes need to be made through an expansion of the existing Green Infrastructure network around Greater Norwich. We favour an alternative approach focused around the deliver new large housing allocations enabling the linked delivery a network of new County Parks as a properly costed requirement of development. We have assembled a number of sites in the following locations which can deliver the following as dedicated mixed-use allocations:

- Barford (circa. 150 dwellings delivering 29ha);
- Rackheath (circa. 300 dwellings delivering 32 ha);
- Salhouse (circa. 90 dwellings delivering 7 ha);
- Hethel (circa. 2000 dwellings as a new garden village delivering 73ha);
- Mulbarton (circa. 180 dwellings delivering 10ha); and

- Caistor St Edmund (circa. 300 dwellings delivering 24.5ha).

This linked housing and new strategic green infrastructure approach will deliver circa 175 ha of new green infrastructure and open recreational spaces in the form of Country Parks for public use. The County Park locations have been selected as they are all on main road corridors, on the edge of existing sustainable growth settlements and are also accessible to walking, cycling and public transport. This smart approach to meeting growth and open space requirements will allow people (both existing and future residents) to live healthier lives in locations that they don't feel the need to escape from at the weekends to reduce the impact to the Natura 2000 sites and on-going and increasing costs to the public purse.

Landscape

Landscape Character and Protection

55. Which of these options do you favour? (refers to options on pg.115)

Lanpro understands the need to protect sensitive landscapes and river valleys but these landscapes are generally subject to existing other levels of protection. We also understand the need to prevent coalescence between existing settlements to protect townscape character and to enable resident populations to have direct access to countryside recreation and benefits. Nevertheless, we object in the strongest possible terms to approaches outlined in options LA1 and LS2.

Both approaches favour the blanket application of Green Belt-type constraint policies for no valid landscape and/or planning reasons when (due largely to a lack of brownfield land supply within the City) the outward expansion of Norwich into the fringe parishes is inevitable. Indeed, the current growth strategy for Norwich as contained in the adopted Joint Core Strategy acknowledges that the Norwich Policy area that is the countryside beyond the existing urban edge is the most sustainable location for new housing and employment growth.

Lanpro favours a new option that seeks to deliver a proper planning approach to development and one that allocates sufficient deliverable and viable housing and employment sites to meet real-time needs (including City Deal growth requirements) rather than the current strategy that seeks to underprovide for all the wrong reasons. This is the most appropriate way to take the development pressures off the higher value fringe parishes beyond the outer edge of the City.

Strategic Gaps

56. Should the GNLP protect additional Strategic Gaps and if so where should these be?

Lanpro does not agree that new Strategic Gaps are required within the Greater Norwich Local Plan area to separate existing settlements. This is because similarly worded countryside policies

already acting as development constraints already exist and this type of quasi-Green Belt-type policy is not required.

Energy

57. Should option EN1 be included in the GNLP?

N/A to this submission

Water

58. Do you support option W1?

N/A to this submission

Communities

Location of Affordable Housing within Sites

59. Do you support option COM1 for the distribution of affordable housing?

N/A to this submission

Health Impact Assessments

60. Which option do you support? (refers to options on pg.123)

N/A to this submission

Neighbourhood Planning

61. Do you support option NP1? If so, which GNLP policies should be “strategic”?

Culture

How Should Culture be Covered in the GNLP?

62. Which option do you support? (refers to options on pg.126-7)

The Broads

63. Do you support option BR1?

Section 7 – Monitoring the Plan

Monitoring of the GNLP

64. Are there any current indicators that should be excluded or included in the GNLP monitoring framework?

The existing indicators on which the JCS is monitored are considered appropriate to carry forward. An additional indicator that could be included is the provision of self-build plots, particularly if Policy Option AH7 is drafted to include provision of self-build plots.

Shortfall in Housing Land Supply

65. Which option do you support? (refers to options on pg.131-2)

We note the policy Option HLS1 to allow the most appropriate HELAA sites to come forward if there were no 5-year land supply. We are concerned that this approach will be difficult to put into practice. If this approach is taken it will presumably be based upon the development hierarchy but how will locations be prioritised between South Norfolk and Broadland in particular? The level of assessment of HELAA sites is minimal and the onus is on the Councils to undertake this rather than the landowner/developer. It will be difficult to prioritise sites based on limited assessment information, in locations where there are multiple sites available. How will this process be undertaken in a fair and transparent way outside of the Local Plan process? It is therefore questionable whether this approach would actually provide a simpler and quicker process than Option HLS2.

We consider that Option HLS2 requiring a short, focussed review of the local plan to allocate more deliverable sites is the only reasonable approach because it is fair and transparent. This also places the onus upon the promoter to provide evidence regarding site suitability and delivery. The need for such a review should be kept under continuous review based upon annual monitoring reports. This was the approach recommended by the Inspector in relation to housing shortfall in the Broadland part of the NPA for the JCS and JCS policy 22 was put in place for this purpose, although it is noted this has not been implemented.

Continuing to allow planning permissions on a 5-year land supply basis until the short focussed review has been completed is a reasonable approach and if an appropriate buffer is added to the housing requirement figure during plan preparation (see our response to question 5), then the likelihood of there being insufficient 5 year housing land supply should be minimal in any case.

General Questions

66. Are there any other issues relating to the GNLP you would like to raise?

6. Site Assessment

The HELAA capacity assessment December 2017 has assessed the suitability and availability of sites for residential development in broad terms by means of a desk top assessment and advice from a range of technical consultees. It identifies potential constraints to development and/or impacts of developing a site which may need further investigation and additional measures to facilitate development e.g. additional infrastructure or mitigation.

Lanpro have commissioned more detailed technical assessments on a range of issues from specialist consultants which have been summarised in Section 4 above. The conclusions of those assessments can be found below. These have enabled us to draw more detailed conclusions on the suitability of this site as set out below:

Constraints Analysis	HELAA Assessment	Lanpro Assessment
Access	Amber	Green
Accessibility to Services	Amber	Green
Utilities Capacity	Amber	Green
Utilities Infrastructure	Amber	Green
Contamination and Ground Stability	Green	Green
Flood Risk	Amber	Green
Market Attractiveness	Amber	Green
Impacts Analysis		
Significant Landscapes	Amber	Green
Townscapes	Amber	Green
Biodiversity and Geo-diversity	Amber	Green
Historic Environment	Amber	Green
Open space and GI	Green	Green
Transport and Roads	Amber	Green
Compatibility with Neighbouring uses.	Green	Green

Access, Transport and Roads

Barford has a good road link via the B1108 to Norwich 13km to the east and links via mainly unclassified roads to Wymondham 6km to the south.

The site has frontage onto Watton Road which offers opportunities for the necessary access points as needed for the scheme. The exact access points and visibility splays will be designed to

meet the development proposals once they are further developed. There are not considered to be any constraints from a highway network perspective to restrict development in this location.

Accessibility to Services

Barford is currently designated as a Service Village which means that it has a range of facilities and services which include a village hall, pub, primary schools and a range of local employment opportunities. There are also regular bus services which run through the village. The site is easily connected to local services either within walking distance or within easy access of bus services.

A development of this size would also bring with it a number of improvements to accessibility such as footpaths, cycleways and bus stops.

Utilities

As part of the preparation of any planning application, a utilities assessment would be undertaken to establish what the capacity of the existing utility services are along with any improvement works that may be needed. This would be established at the early stages to ensure that the viability of any upgrades is incorporated into the project.

Contamination and Ground Stability

A Phase 1 desk study and/or any intrusive ground testing that may be considered necessary will be undertaken as part of any planning application. From viewing historic maps and the knowledge of the landowner, there have been no uses of the site which might result in potential contamination as the land has always been historically in agricultural use. Reviewing the British Geological Society online published records it would appear that some areas of the site may be suitable for infiltration drainage techniques due to the presence of sands & gravels beneath the surface.

Flood Risk

The site is largely within Flood Zone 1 but there are parts in the east of the site which are considered to be within Flood Zones 2 and 3. The masterplanning of the site would take a sequential approach and ensure that uses such as residential which are considered to be 'more vulnerable' by the Environment Agency would not be located within these areas. The illustrative masterplan has taken that approach.

The residential area of the development will be designed to the latest national and local guidance regarding surface water management and run off and will incorporate SUDS to replicate the existing greenfield conditions. Replicating greenfield run off rates and using source control SUDS techniques will ensure that the development does not increase flood risk within the new development area or outside of the site boundary. As noted above it appears that the ground conditions will be suitable for infiltration drainage techniques.

The proposals will also look at flood alleviation measures which can be incorporated into the design.

Market Attractiveness

The site has been discussed with local agents who are familiar with the market and the response has been:

Barford is conveniently located some 4 miles from the Historic market town of Wymondham and a short drive to Hethersett. As an area it proves to be very popular and sought after with the core market being bungalow orientated with it being popular for people who are nearing or indeed retirement.

The site overlooking a country park is one that would attract given its setting and location. Properties could be overlooking an open area whilst not being far away from the neighbouring market town of Wymondham & Hethersett as well as Norwich. The country park will have the advantages of those wanting winter morning walks or summer evening and perfect for dog owners or those keeping active.

Once development of the masterplan begins, advice would be taken on the type of properties which best address the market in the area.

Landscape and Townscape

The design of the site seeks to integrate the proposed development into the wider landscape by retaining and enhancing landscape features typical of the patterns found in the local landscape as identified in the in the Mid Norfolk National Character Profile Area¹ and the South Norfolk Council Yare / Tiffey Rural River Valley Landscape Character Assessment (LCA)^{2,3}.

The outline concept design of the site has three main objectives;

1. To minimise views of the proposed development from the wider landscape by creating woodland belts
2. To retain and provide ecological enhancements to the flood plain pasture within the Sub Regional Green Infrastructure corridor along the western bank of the River Tiffey
3. To provide new areas of low-maintenance, publicly accessible parkland and amenity areas with integrated sustainable drainage features to benefit local residents (existing and proposed) and wildlife

The landscape setting of the proposed development creates a pattern of more formally landscaped areas to the north around the proposed built development. These create a cared-for landscape setting for the proposed dwellings and could provide community amenity areas such as open grass areas for ball games and frisbee, equipped play areas, allotments and community orchards. It is proposed that these graduate into informal, rural open spaces in the south, each with its own character to maintain the visual diversity typical of the area and to provide a mosaic of habitat types to increase ecological diversity. This area could include wet and dry meadow, woodland and seasonally grazed tussocky wet meadow with permanent and ephemeral ponds within the functional flood plain of the Tiffey.

This series of green spaces along a north-south axis would allow the creation of a sustainable drainage systems infrastructure which utilises the naturally falling contours of the land to move surface water through a SUDs chain arising in the developed area to the north and culminating in

the area of hummocky pastureland adjoining the River Tiffey along its western bank. This could allow the creation of a series of ponds and pools in this area that would create ecological enhancements within the Sub Regional GI corridor, capitalising on a key landscape enhancement opportunity as identified by the 2001 South Norfolk LCA of 'river management to repair and encourage the development of diverse wetland ecosystems.'

A main circular walking and cycle path linked to proposed residential areas could connect the new and existing residents to community facilities and amenity areas, passing through meadow, woodland and wetlands where there are opportunities for informal exercise and recreation such as walking, running and dog walking. Informal 'desire line' paths could be allowed to be created off this to create an informal network of low-impact access paths within a low-maintenance, naturalistic landscape.

Areas of woodland planting could extend existing woodland and provide 'stepping stone' patches to create corridors for the movement of wildlife linked to Tiffey Woods County Wildlife Site. To the north-west woodland belts could be planted to screen the built edge from view within the wider landscape and to create a shelter within the development from the prevailing south westerly wind.

Biodiversity and Geodiversity

A desk top study has been undertaken over the site and it establishes the baseline conditions of the site and the surrounding ecological context. It found that there have been a number of protected species and species of conservation found locally but none in any significant number that would restrict development of the site. It identifies that the main habitat related constraints to the site are likely to the boundary hedgerows and the bankside habitat along the River Tiffey. There are onsite ponds and woodland but none are shown to be Habitats of Principal Importance.

Any application for development of this site would be accompanied by the necessary Protected Species Surveys which would be undertaken during the appropriate survey windows and any subsequent development work would be subject to standard measures around timing of works to avoid nesting birds and prevention of water pollution etc. Given the land available within this site, the masterplanning of the development will incorporate mitigation to limit impacts from the built environment in the vicinity of sensitive features such as the River Tiffey, retention of trees which may have bat roosting potential.

As noted above, a sub-regional green infrastructure corridor runs along the corridor of the River Tiffey. Site landscaping could contribute to this corridor by providing enhanced bankside habitat and also by creating semi-natural habitat within this broader corridor. This would increase the extent of habitat in absolute terms and also support the role of this corridor as a link across the landscape. These enhancement measures will also be relevant to the Claylands Living Landscape.

Thus, soft landscaping is potentially an appropriate Site enhancement, using appropriate native species and species of known wildlife value. Key points for many species groups is the need for insect prey, for bats and also for the chicks and fledglings of many birds. Thus, a range of native plant types should be planted to provide a range of resources across the seasons from spring to

autumn (insects and their predators), and also fruit and berry producing species in autumn and winter (birds). Such planting will also be of direct value to the widespread declining moths that are known locally.

For grassland creation and within any SUDS features, a number of wildflower seed mixes are available from commercial suppliers, including wetland and pond planting (e.g. Emorsgate EM8 meadow mixture for wetlands), wildflower swards (e.g. EM4 meadow mixture and EM10 tussock mixture) and flowering lawns for areas with more intensive use and management (e.g. EL1 flowering lawn mixture).

Additional measures of likely value would be bird and bat boxes, habitat piles, and allowing continued movements of hedgehogs across the Site with measures such as access holes within garden fences.

Historic Environment

The site does not contain any designated heritage assets, however, there are 16 listed buildings and one conservation area within 1km of the site.

Ten of the sixteen listed buildings, plus the conservation area, are located to the south of the site and are unlikely to be sensitive to development proposals which is restricted to the north of the site. Three further listed buildings are located within the historic core of Barford and are well screened from the proposed development site by existing development and are, therefore, not considered sensitive to proposed development.

Therefore, the designated heritage assets considered to be potentially sensitive to development proposals are restricted to the Grade II* Church of St Botolph (NHLE 1050737), and the Grade II listed War Memorial at St Botolphs (NHLE 1446034) and Sayers Farm House (NHLE 1373036).

In relation to archaeology, the parish has been extensively fieldwalked and surveyed by metal detector. These activities have yielded Roman coins and pottery as evidence of the Roman occupation and Saxon brooches and pottery as evidence of continuing habitation.

The Norfolk Historic Environment Record has not yet been consulted for full details of recorded archaeology within, and in the vicinity of, the site. However, the online Norfolk Heritage Explorer does not record any known monuments or findspots within the site.

Any application for development of this site would be accompanied by a Heritage Statement and an Archaeological Desk Based Assessment and or geophysical survey (where built development is proposed).

Given the land that is available within this site there is ample opportunity to ensure that sufficient separation is created from the built development and any areas that may be identified as being sensitive in relation to heritage and/or archaeology.

Open Space

The significant benefit that the site could deliver is the provision of a significant area, approx. 29ha, of open space which would be comprised of a country park, recreational open space and walkways.

Provision of new large housing allocations enables the delivery of these linked networks of new Country Parks as a properly costed requirement of development rather than having a number of smaller areas within developments which never meet the need for large areas of Green Infrastructure. This Country Park will provide an area where locals can go and walk dogs or have a long walk rather than just simply an area for equipped play which is most commonly found in residential developments.

These larger areas will help in taking recreational pressures from the Broads but without these large areas being allocated this is unlikely to happen.

This site will be developed with the Green Infrastructure at the heart of the project and not having the open space as a token gesture which is the situation that currently happens frequently with residential developments.

Compatibility with Neighbouring Uses

The built development will be located close to the existing village of Barford whilst the open spaces would be on the edge of the built environment to provide a soft edge to the development and integrate into the countryside edge.

Taking account of the above and the assessment work that has been undertaken as part of the outline application, the site is SUITABLE for development and there are no constraints to allocation of this site for residential purposes.

7. Conclusions

It is demonstrated in this submission that the proposals for this site (assigned the reference GNLPO552) can deliver much needed new housing and will contribute to the achievement of sustainable development.

The proposals are consistent with the principles of policies set out in the National Planning Policy Framework, including the presumption in favour of sustainable development. The mixed-use proposals that deliver the new Barford Country Park are aspirational but realistic.

It is further demonstrated that the proposals will deliver much needed green spaces to enhance the natural environment and the village setting and will result in significant net environmental gains.

Lanpro is therefore seeking the allocation of the 37.39ha site for residential dwellings which could include a mix of private, affordable and self-build/custom build properties and provision of a major new public park with landscape enhancements in the rural area around Barford.

8. Next Steps

Lanpro and the landowner are seeking early and meaningful engagement with the Local Planning Authority to deliver the emerging mixed-use scheme for this Barford site.

This will enable all involved to plan positively for new growth, better understand specific local housing needs and to meet known existing green infrastructure deficiencies within this part of the Greater Norwich area early in the Plan period.



Appendices










Appendix 1 Illustrative Masterplan



Note

SUMMARY

-  Access
-  Site Boundary
-  Housing Net Developable Area
-  Green Infrastructure
-  Shared Road & Footways
-  Road
-  Parking

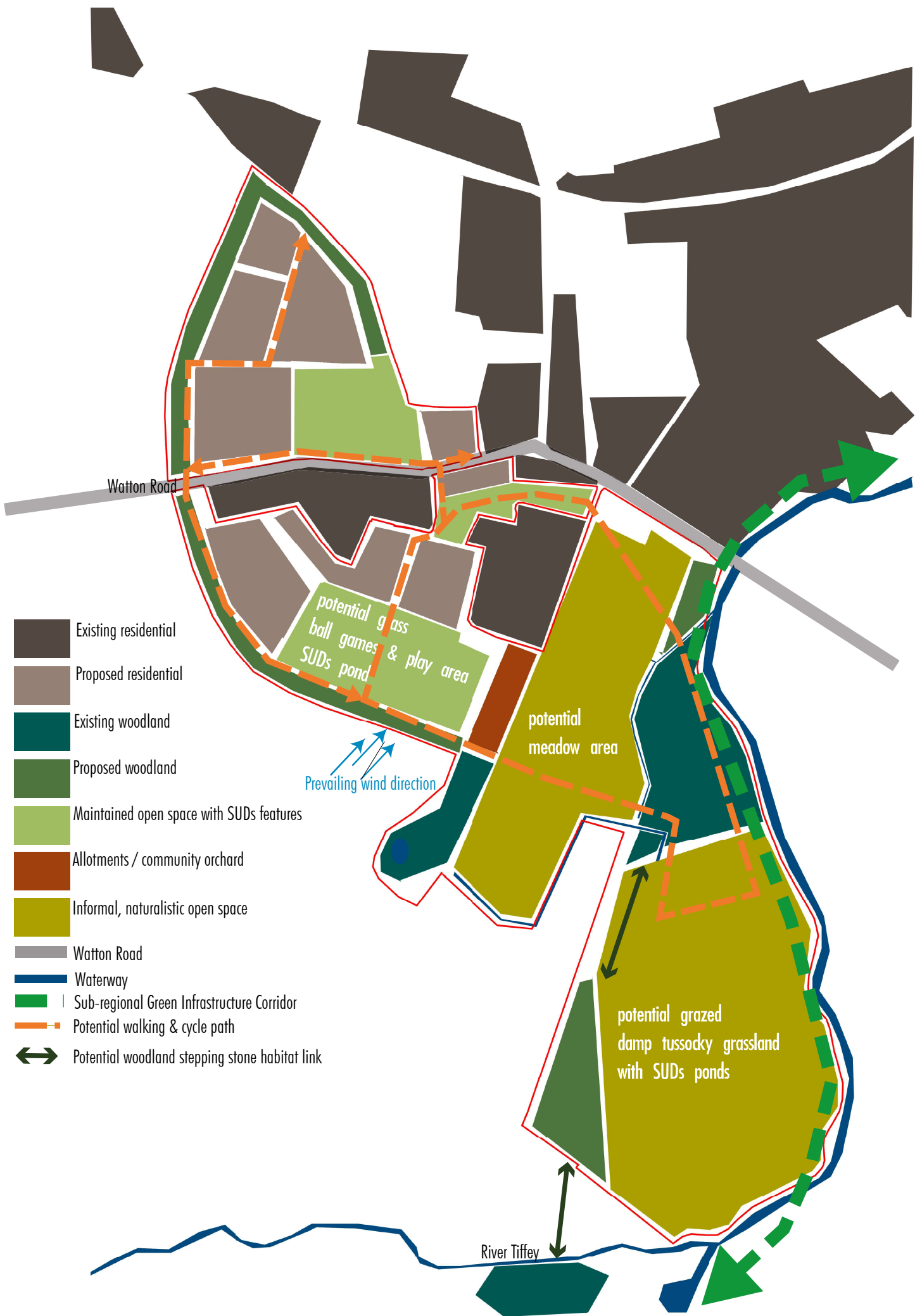
Site Area	36.80 Ha
Net Developable Area	6.24 Ha
Gross Housing Density	3.39 Dw@Ha
Net Housing Density	20 Dw@Ha
No. Houses	125 Houses
Green Infrastructure	28.95 Ha
Green Infrastructure	79%

PROJECT TITLE	Barford
PROJECT NUMBER	0521
CLIENT	Lanpro
DRAWING TITLE	Proposed Site Layout
DRAWING NUMBER	0521 - 00- 02
REV	A
SCALE	1:2500 @ A2
DATE	MARCH 2018
DRAWN BY	AT / AO

Lanpro

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- Existing residential
- Proposed residential
- Existing woodland
- Proposed woodland
- Maintained open space with SUDs features
- Allotments / community orchard
- Informal, naturalistic open space
- Watton Road
- Waterway
- Sub-regional Green Infrastructure Corridor
- Potential walking & cycle path
- Potential woodland stepping stone habitat link

Watton Road

Prevailing wind direction

potential grass
ball games & play area
SUDs pond

potential
meadow area

potential grazed
damp tussocky grassland
with SUDs ponds

River Tiffey



Appendix 2 Technical Notes

Site: **Local Plan Promotion Site: Land in Barford**

Work Item: **Briefing Note: Preliminary Ecological Overview**

Author: Dr GW Hopkins CEnv MCIEEM

Date: 19 March 2018

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1. INTRODUCTION

- 1.1 Hopkins Ecology Ltd were appointed by Lanpro to provide a preliminary ecological overview of a site in Barford, Norfolk for the purposes of informing local plan promotion. This briefing note is based on a desk-study review of information on local species and habitats, designated sites and green infrastructure. It is intended to provide an overview of the Site and the likely constraints and opportunities from any development scheme.

2. METHODS

- 2.1 A formal data search was commissioned from the local records centre with information also extracted from other sources (Table 1). As far as possible, this information is used for the purposes of habitat and species scoping, although it is constrained by the limits of the available data.

Table 1. Overview of desk study data sources.

Source	Information
Norfolk Biodiversity Information Service	Designated sites, species of conservation concern; 2km search radius
MAGIC (www.magic.gov.uk)	Additional information on statutory sites, habitats of principal importance and wider countryside information
South Norfolk DC and GNDP planning policy documents	Information regarding local green infrastructure proposals
Local Planning Applications, manual searching of the South Norfolk DC website	Recent survey data for protected species locally, including negative data
Various literature and web-based searches	Information on local projects and initiatives of potential relevance as well as some species-level data, including the Norfolk Wildlife Trust's Living Landscapes ¹ and Buglife's B-Line ² (bee-line) initiatives
Historic maps of Norfolk (http://www.historic-maps.norfolk.gov.uk/)	Aerial photographs from 1988 and 1946 (with Google Earth for later images); OS maps from 1880s and earlier

¹ <http://www.wildlifetrusts.org/living-landscape>

² <https://www.buglife.org.uk/b-lines-hub/map>

3. THE SITE CONTEXT

3.1 The Site is within the *Mid-Norfolk Natural Character Area*³, which is characterised as:

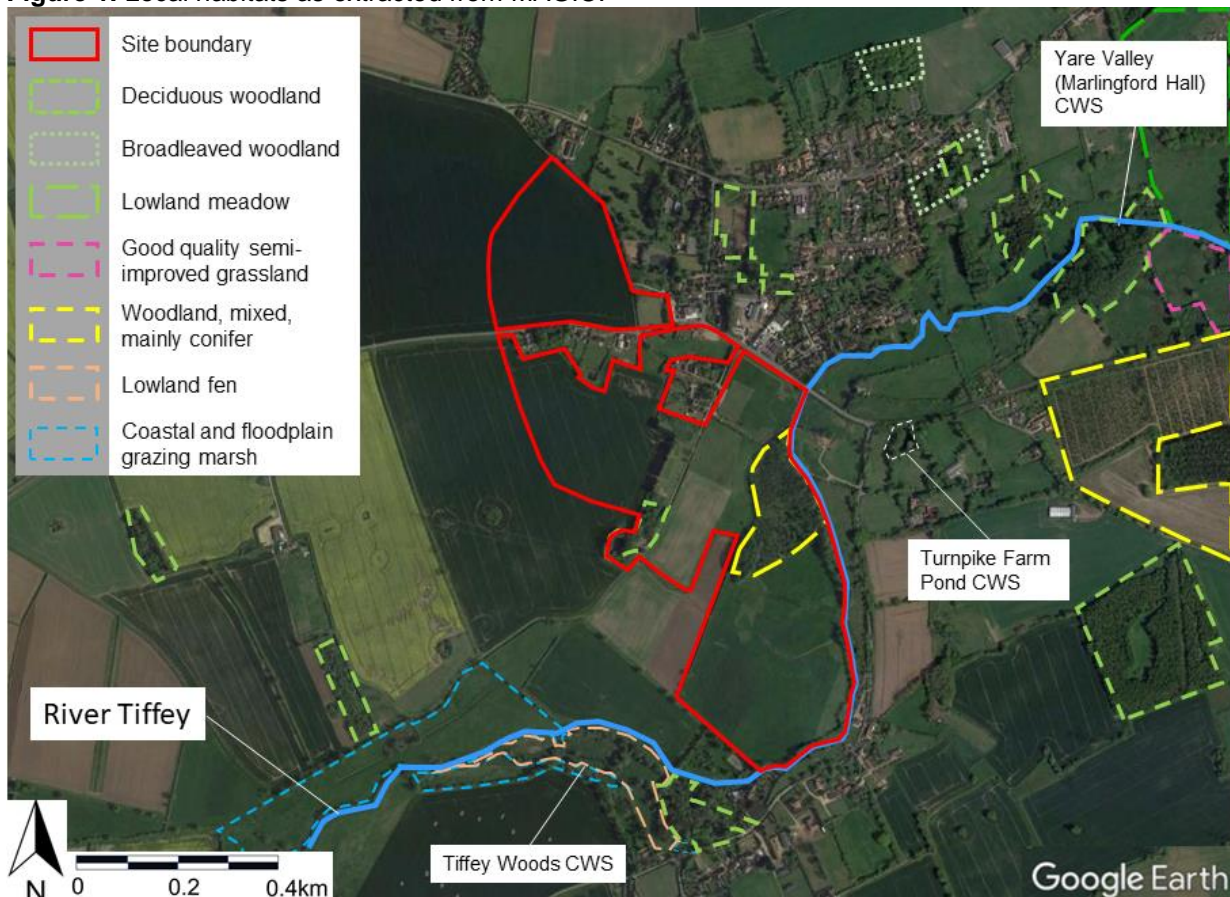
“A rich agricultural area with small- to medium- scale fields and is mainly unwooded. Isolated farmsteads and small nucleated villages with large medieval churches are linked by a dense network of lanes”.

3.2 The soil profile changes across the Site, from ‘slightly acid loamy and clayey soils with impeded drainage’ in the western part to ‘loamy and sandy soils with naturally high groundwater and a peaty surface in the eastern part’”.

3.3 The Site itself lies on the left bank of the River Tiffey, with a total area of ~36.7ha and a frontage along the River Tiffey of ~870m. Within the Site the only block of habitat marked on MAGIC is located along the east boundary and is shown as: ‘woodland, mixed, mainly conifer’ (Figure 1). Most of the remainder of the site appears to be arable farmland and grassland, with hedgerows. There appears to be a pond along the west boundary and two more off-Site within 250m.

3.4 The key feature in the wider landscape is the River Tiffey, including areas of fen (the Tiffey Woods County Wildlife Site) and grazing marsh in the valley bottom upstream of the Site. The wider landscape includes blocks of woodland of different types.

Figure 1. Local habitats as extracted from MAGIC.

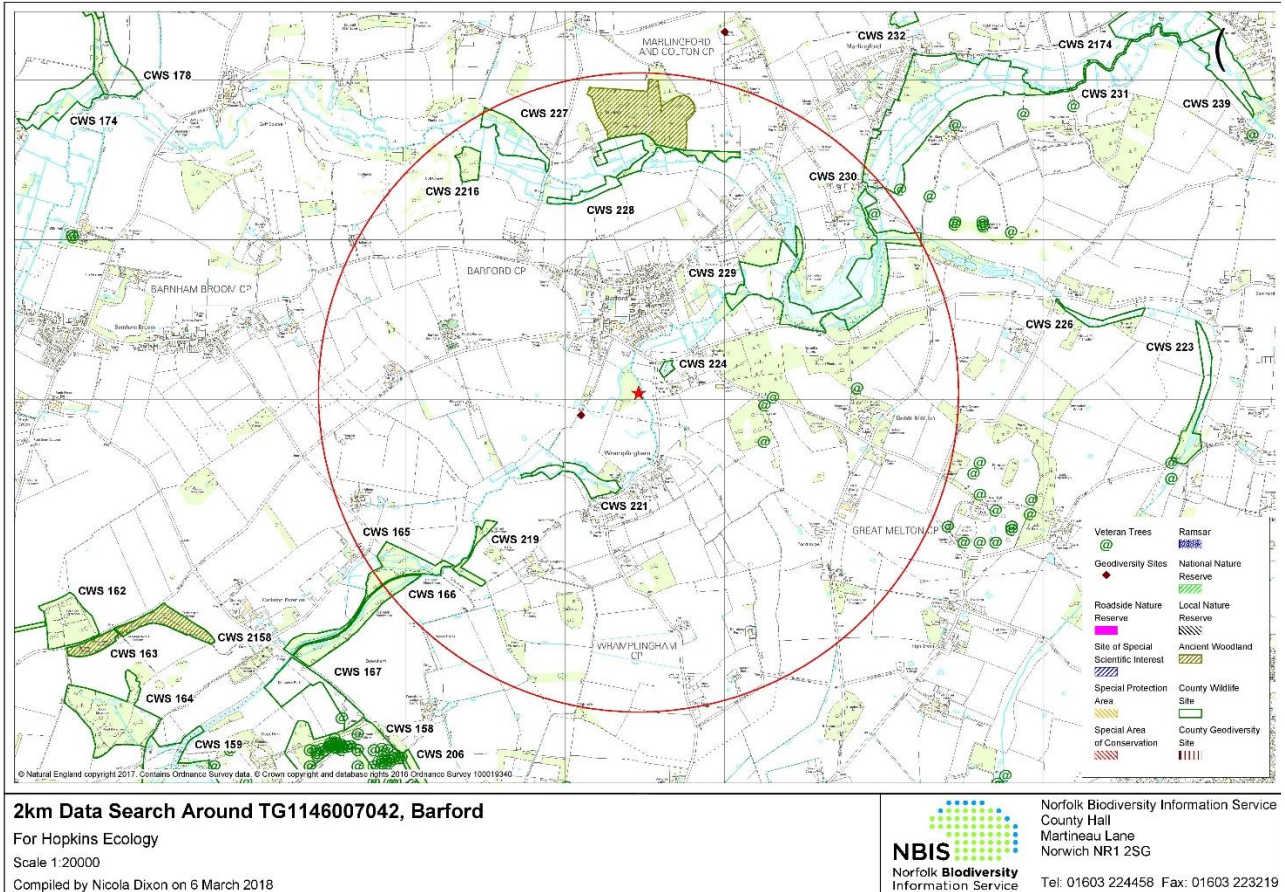


³ Natural England (2014) *NCA Profile 84: Mid-Norfolk*. Available from: <http://publications.naturalengland.org.uk/publication/4560839075954688>

4. DESIGNATED SITES OVERVIEW

- 4.1 This Site is located on the western site of the River Tiffey, with all but one designated site associated with the River Tiffey valley bottom (upstream and downstream) or otherwise with the River Yare valley, either upstream or downstream of its confluence with the River Tiffey (Figure 2).

Figure 2. Designated sites within 2km.



STATUTORY SITES

- 4.2 There are no statutory sites within 2km.

NON-STATUTORY SITES

- 4.3 There are ten non-statutory County Wildlife Sites (CWSs) within 2km (Table 2). One is within open countryside and the others are associated with the River Tiffey or River Yare valley bottoms. The nearest is Tiffey Woods CWS, 115m upstream and a mosaic of fen and woodland.
- 4.4 Other than Yare Valley (Colton) CWS (478m north), it is not thought there is public access to any of the CWSs as viewed on OS footpath maps.

Table 2. County Wildlife Sites within 2km.

Proximity		CWS name (reference)	Description
Location	Distance		
Tiffey valley, downstream	519m north-east	Yare Valley (Marlingford Hall) (229)	Woodland, marshy grassland and fen
Tiffey valley, upstream	115m south	Tiffey Woods (221)	Woodland and fen either side of the River Tiffey
	820m south-east	Spring Plantation (219)	Old plantation
	1.12km south-west	Carlton Plantation (166)	A thin strip of wet woodland
	1.2km south-west	Tiffey River Corridor (165)	Wet and dry woodland
Yare valley, downstream	1.95km north-east	Yare Valley (Marlingford) (230)	A diversity of habitats (woodland, marsh, tall fen and grassland) situated on flat land either side of the River Yare
Yare valley, upstream	478m north	Yare Valley (Colton Wood) (228)	Low-lying marshy grassland and tall fen
	680m north	Yare Valley (Colton) (227)	Wet plantation woodland with fen and marshy grassland
	840m north-west	Yare Valley (Barford) (2216)	A mosaic of scrub, fen and wet neutral grassland
Wider countryside	166m east	Turnpike Farm Pond (224)	A large pond surrounded by species-poor grassland

5. GREEN INFRASTRUCTURE

- 5.1 Green infrastructure (GI) is considered to be a key requirement for development in the Norwich fringes, with the policy requirements originating in the Joint Core Strategy⁴. The spatial vision for these corridors is informed by a Green Infrastructure Strategy (CBA, 2007⁵) and associated studies (e.g. Green Networks: Norfolk Wildlife Trust, 2007⁶).
- 5.2 A sub-regional green infrastructure corridor runs along the River Tiffey corridor⁷ (Figure 3):
- The North West Norwich - Wymondham - Attleborough - Thetford Corridor sub-regional green infrastructure corridor.
- 5.3 The site is not within Buglife B-Line (bee-line). However, it is within the Claylands Living Landscape⁸ of the Norfolk Wildlife Trust, as is the rest of the South Norfolk DC area:

“The Claylands Living Landscape project aims to enhance the management of the area’s wildlife habitats and expand its area of grassland and woodland – thereby creating a more joined-up ecological network – as well as to encourage the more sensitive management of farmland. To achieve this aim, (Norfolk Wildlife Trust) will be working closely with community groups and landowners in South Norfolk to raise wildlife awareness, as well as encouraging their active participation in conserving and enjoying the area’s historic natural environment.”

⁴ Greater Norwich Development Partnership (2014) *Joint Core Strategy for Broadland, Norwich and South Norfolk*. Available from: <http://www.greaternorwichgrowth.org.uk/planning/joint-core-strategy/>

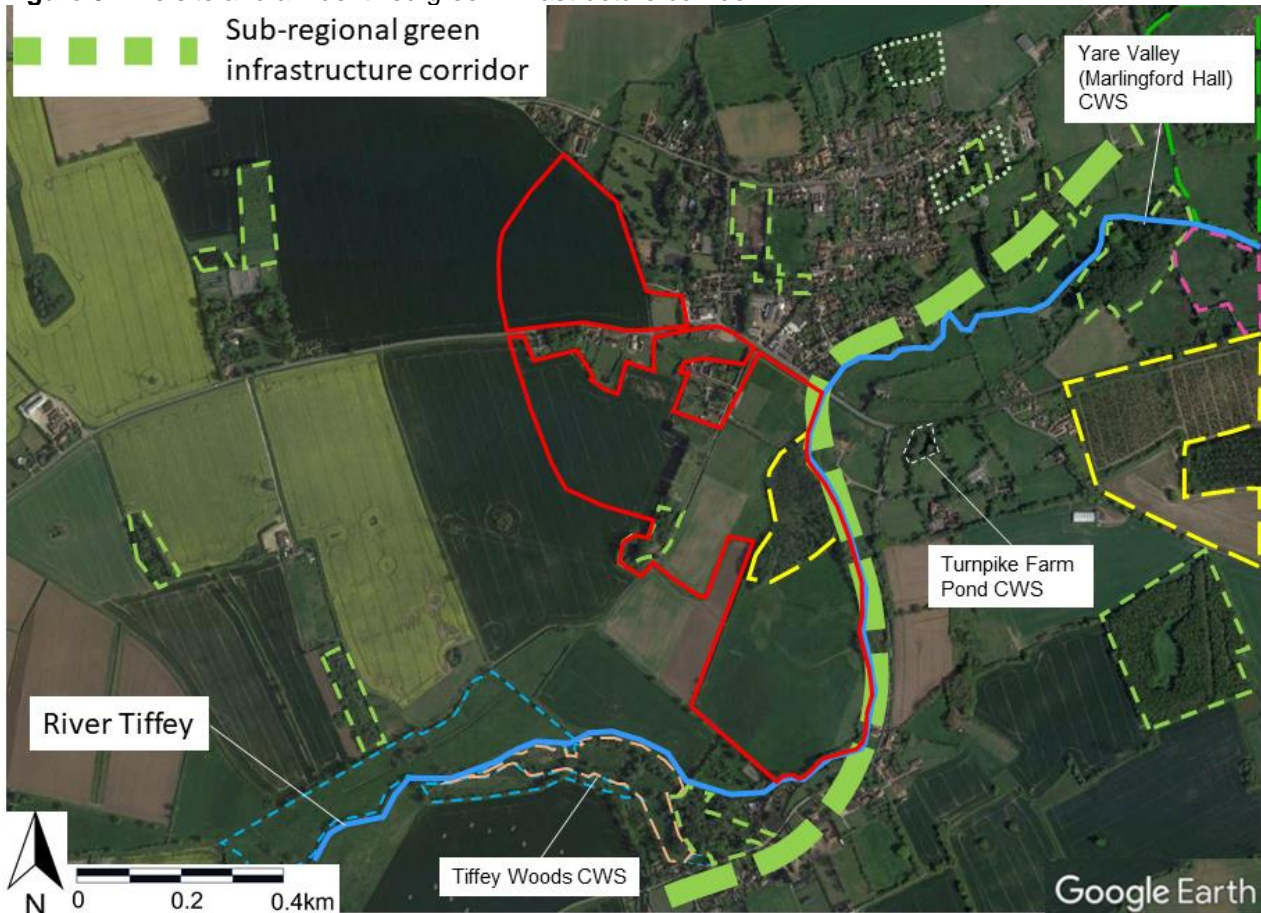
⁵ CBA (2007) *Greater Norwich Development Partnership. Green Infrastructure Strategy. A Proposed Vision for Connecting People, Places and Nature*. Available from: <http://www.greaternorwichgrowth.org.uk/dmsdocument/201>

⁶ Norfolk Wildlife Trust (2006) *Report of the Ecological Network Mapping Project for Norfolk*. Available from: http://www.norfolkbiobiodiversity.org/pdf/news/Final_report_of_indicative_map_July%202006.pdf

⁷ <http://www.greaternorwichgrowth.org.uk/dmsdocument/1590>

⁸ <https://www.norfolkwildlifetrust.org.uk/a-living-landscape/claylands>

Figure 3. The site and an identified green infrastructure corridor.



6. PROTECTED SPECIES SCOPING

- 6.1 Records for several protected species and species of conservation concern were returned by the data search, with these listed in Table 3 (arranged by species or species-group as appropriate).
- 6.2 Although it is not possible to fully scope for these species as a desk-based exercise, it is not thought that any would be present in significant numbers, and if present they would almost certainly be components of larger local populations.

Table 3. Protected species and species of conservation concern known locally.

Species-group	Data search records	Comment
Great crested newts	Singleton record, 1.4km east	Three ponds either on-Site or within 250m. Potentially present
Bats	Seven species known locally: barbastelle, Daubenton's, noctule, Nathusius' pipistrelle, soprano pipistrelle, common pipistrelle and brown long-eared. Brown long-eared roost >1.5m distant	Possibly roosts within hedgerow trees, boundary features including River Tiffey likely to be used for foraging
Water voles and otters	No records	Potentially present along the River Tiffey
Reptiles	Singleton record of grass snake from close to the limit of the 2km search radius	Not typically associated with arable farmland in Norfolk, thus less likely to be present
Badger	Records from close to the limit of the 2km search radius	Cannot be scoped-out at this stage

Species-group	Data search records	Comment
Birds	A small assemblage of species associated with open fields and hedgerows: grey partridge, lapwing, turtle dove, mistle thrush, spotted flycatcher starling, linnet and bullfinch	Nesting birds likely, including common and widespread but declining species. Specialist species less likely
Brown hares	Several records from local landscape, nearest ~200m distant	The site appears to have open arable and grass fields, thus they are potentially present
Hedgehogs	Numerous records within 2km	Potentially present
Invertebrates	Records for 29 species of widespread but declining moths, all generalists	Habitat likely to support a small assemblage of declining but widespread moths. Specialist species less likely

7. DISCUSSION

IMPACTS

Designated Sites

7.1 It is thought that impacts on designated sites are less likely and can be realistically reduced to a negligible level:

- Recreational impacts. Nearby CWSs do not have public access, other than for Yare Valley (Colton) CWS (478m north) which is traversed by public footpaths from the north boundary of Barford. The absolute increase in the numbers of users is likely to be low as it is moderately distant, and there is the potential for on-Site greenspace to offer alternative recreation areas.
- Surface water management. As a part of any scheme there will be a SUDS scheme to manage surface water run-off in terms of volume and quality. It is considered feasible for such a mitigation train (CIRIA, 2015⁹) to be an integral component of any scheme, such that downstream impacts will be negligible.

On-site Habitats

7.2 Habitat loss is likely to be the principal pathway of on-Site impacts, and these can be minimised via masterplanning and through soft landscaping to provide alternative and increased areas of habitat. Other pathways, such as artificial lighting, can mostly be mitigated via scheme design.

ECOLOGICAL CONSTRAINTS

Habitats and Species

7.3 Based on this initial assessment the main habitat-related constraints are likely to be boundary hedgerows and the bankside habitat along the River Tiffey. Other features of value are likely to include the on-Site pond and woodland. As shown on MAGIC none are Habitats of Principal Importance, but it is thought likely that the hedgerows will qualify, and possibly also the on-Site pond and River Tiffey.

⁹ CIRIA C753 (2015) *The SuDS Manual*. Available from: http://www.ciria.org/Resources/Free_publications/SuDS_manual_C753.aspx

Mitigation

- 7.4 Mitigation of construction impacts is likely to include generic measure such as the timing of works to avoid nesting birds and also measures to avoid water pollution (e.g. see the guidance of SEPA, 2017¹⁰). If protected species, e.g. great crested newts, are present then there may be requirements for more specific mitigation measures, including translocation of individuals and the creation of designated receptor sites. Masterplanning should also be used to mitigate impacts by limiting built development in the vicinity of sensitive features, such as the River Tiffey and possibly any trees with bat roost potential.
- 7.5 It is thought that mitigation is likely to be feasible for most species that may be present, including any protected species.

DESIGN AND ENHANCEMENT OPPORTUNITIES

Strategic Context

- 7.6 As noted, a sub-regional green infrastructure corridor runs along the corridor of the River Tiffey. Site landscaping could contribute to this corridor by providing enhanced bankside habitat and also by creating semi-natural habitat within this broader corridor. This would increase the extent of habitat in absolute terms and also support the role of this corridor as a link across the landscape. These enhancement measures will also be relevant to the Claylands Living Landscape.

Soft Landscaping

- 7.7 Thus, soft landscaping is potentially an appropriate Site enhancement, using appropriate native species and species of known wildlife value. Key points for many species groups is the need for insect prey, for bats and also for the chicks and fledglings of many birds. Thus, a range of native plant types should be planted to provide a range of resources across the seasons from spring to autumn (insects and their predators), and also fruit and berry producing species in autumn and winter (birds). Such planting will also be of direct value to the widespread declining moths that are known locally.
- 7.8 For grassland creation and within any SUDS features, a number of wildflower seed mixes are available from commercial suppliers, including wetland and pond planting (e.g. Emorsgate EM8 meadow mixture for wetlands), wildflower swards (e.g. EM4 meadow mixture and EM10 tussock mixture) and flowering lawns for areas with more intensive use and management (e.g. EL1 flowering lawn mixture).
- 7.9 Additional measures of likely value would be bird and bat boxes, habitat piles, and allowing continued movements of hedgehogs across the Site with measures such as access holes within garden fences.

CONCLUSION

- 7.10 The Site appears to be mainly arable and grass fields, and as shown on MAGIC there are no Habitats of Principal Importance within the Site. It is likely, however, that the hedgerows will qualify as a Habitat of Principal Importance and possibly also ponds and the River Tiffey.
- 7.11 Based on the data search records a number of protected species and other species of conservation concern are known locally. For example, great crested newts are known within 2km and there are at least three ponds within 250m, and there are also local assemblages of declining but widespread species, such as birds and moths.

¹⁰ SEPA (2017) *Guidance for Pollution Prevention Works and maintenance in or near water: GPP 5 January 2017*. Available from: <http://www.netregs.org.uk/media/1418/gpp-5-works-and-maintenance-in-or-near-water.pdf>

- 7.12 It is thought likely that the mitigation of impacts can be achieved for most species via a combination of measures such as the timing of works, scheme design and soft landscaping. For protected species, if present, it is thought likely that the mitigation of impacts will be feasible.
- 7.13 A sub-regional green infrastructure corridor runs along the corridor of the River Tiffey, including the eastern part of the Site. This corridor provides a strategic context to mitigation via soft landscaping, to create new areas of habitat along the bankside areas and elsewhere.
- 7.14 There are no statutory sites within 2km, and the nearest County Wildlife Site is 115m upstream and there are another nine within 2km. Other than one CWS located 487m to the north none of these sites have public access via footpaths, thus recreational impacts are less likely and on-Site greenspace may offer alternative recreation areas. Appropriate measures to limit water pollution during construction and a SUDS scheme to manage surface water run-off could feasibly avoid impacts on the CWSs located downstream on the Rivers Tiffey and Yare.
- 7.15 In conclusion, it is considered that the likely impacts on the majority of species can be mitigated via appropriate landscaping and scheme design. Given the habitats and species likely to be present it is thought that this is feasible and realistic. The presence of a sub-regional green infrastructure corridor provides a strategic spatial context for soft landscaping to create new areas of habitat.

REFERENCE: 0009/FR Statement

15th March 2018

Barford Development, Norfolk
Outline Flood Risk Statement

Prepared for:

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Proposed Mixed Use Development, Off Watton Road, Barford, Norfolk

Drainage

SUDS

Infrastructure

Highways

Earthworks

INTRODUCTION

Further information is required to satisfy the Local Planning Authorities concerns regarding flood risk for the proposed mixed-use development site in Barford, Norfolk. The proposed development is promoted for dwellings, public park, landscape enhancements and other associated open spaces.

OUTLINE ENGINEERING & FLOOD RISK STATEMENT

The proposed development is approximately 36.80ha in area and consists mainly of agricultural / greenfield land. There are some existing residential areas (houses and roads) which lay within the overall development area which will remain unchanged by the development.

The closest main River to the site is the River Tiffey which forms the eastern boundary of the development area flowing north where it meets the River Yare to the north east of Barford. The River Tiffey is an Environment Agency (EA) maintained Main River.

Examining the EA's published online flood maps reveals that part of the development area is within Flood Zone 2 (Medium Risk) & Flood Zone 3 (High Risk). These flood areas are constrained to the eastern side of the development area. The areas within Flood Zone 3 are likely to be considered functional flood plain i.e. within the sub category Flood Zone 3b. Most of the site however falls within Flood Zone 1 (Low Risk).

The predicted Flood Zone 2 & 3 flood extents do not affect the existing residential areas within the overall development area.

On comparison with the proposed development layout plan, the areas to the east of the site within Flood Zones 2 & 3 have been allocated as green infrastructure i.e. parks, public open spaces, wetlands etc. Under Table 2 the NPPF flood risk guidance, this proposed type of land use (green infrastructure) is classified as "water compatible development" and therefore

subject to the appropriate detailed design will not increase flood risk in the local area or any developed area within the overall development boundary.

The areas on the proposed site plan which are denoted as residential development are towards the western / norther western area of the site. These areas are within Flood Zone 1 and are at low risk of river (fluvial) flooding from the River Tiffey. Under Table 2 the NPPF flood risk guidance, this proposed type of land use (dwellings) is classified as “more vulnerable” and is permitted development within Flood Zone 1 subject to a formal site-specific Flood Risk Assessment and Drainage Strategy as the residential development area is greater than 1 ha.

The residential area of the development will be designed to the latest national and local guidance regarding surface water management & run off and will incorporate SUDS to replicate the existing greenfield conditions. Replicating greenfield run off rates and using source control SUDS techniques will ensure that the development does not increase flood risk within the new development area or outside of the site boundary.

Reviewing the British Geological Society online published records it would appear that some areas of the site may be suitable for infiltration drainage techniques due to the presence of sands & gravels beneath the surface. However, this will need to be assessed further with an intrusive site investigation.

This statement has been prepared by:

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Pritchard Civil Infrastructure Design Ltd

Archaeology and Heritage

Introduction

The site does not contain any designated heritage assets, however, there are 16 listed buildings and one conservation area within 1km of the site.

Ten of the sixteen listed buildings, plus the conservation area, are located to the south of the site and are unlikely to be sensitive to development proposals which is restricted to the north of the site. Three further listed buildings are located within the historic core of Barford and are well screened from the proposed development site by existing development and are, therefore, not considered sensitive to proposed development.

Therefore, the designated heritage assets considered to be potentially sensitive to development proposals are restricted to the Grade II* Church of St Botolph (NHLE 1050737), and the Grade II listed War Memorial at St Botolphs (NHLE 1446034) and Sayers Farm House (NHLE 1373036).

Barford is a small parish located west of the city of Norwich and sandwiched between Barnham Broom to the west and Great Melton and Wrampingham to the east. Its name comes from the Old English for 'Barley ford', a ford used at harvest time. In the Domesday Book the area is recorded as being owned by Count Alan, Richard and St Benedict of Holme 'for the supplies of monks'. Prior to the Conquest, the land had been owned by Gyrrh and Stigand, who were probably Saxons.

The archaeological record suggests there was human activity in the parish from the earliest times. Prehistoric finds include a Palaeolithic flint core and Neolithic flint axes, scrapers, flakes and blades. Also found have been burnt mounds, prehistoric collections of burnt stone that were probably heated in fires and used to warm food or liquids. There does not appear to be any evidence for Bronze Age habitation, although some of the flint finds in the area have only been given the general classification of prehistoric, and may date to this period. Likewise, evidence of activity in the Iron Age is confined to a single coin.

The parish has been extensively fieldwalked and surveyed by metal detector. These activities have yielded Roman coins and pottery as evidence of the Roman occupation and Saxon brooches and pottery as evidence of continuing habitation.

These surveys have also turned up pottery, coins and a brooch from the medieval period. However, the only medieval building to survive is St Botolph's Church which has a 13th century nave (possibly even earlier) and a 14th century tower. A medieval cross is mentioned in old texts but nothing remains today.

The Norfolk Historic Environment Record has not yet been consulted for full details of recorded archaeology within, and in the vicinity of, the site. However, the online Norfolk Heritage Explorer does not record any known monuments or findspots within the site.

Proposed works

An archaeological desk based assessment and heritage statement will be produced that will assess the significance of known heritage assets within and around the site and the potential impact upon that significance through development within their settings. It will assess the potential for the presence of as yet unknown buried archaeological remains within the site. It will also assess the likely impact of the proposal, as known, on the significance of those remains.

The reports will compile information on the historic environment from the Norfolk Historic Environment Record, from Historic England databases, relevant archives and local studies resources. Consultation will also be undertaken with the appropriate local authority planning archaeologists, conservation officers and Historic England, as necessary.

Having established baseline archaeological conditions and the likely impact of the proposal on the archaeological resource, the desk based assessment will assess the need for any further investigations (e.g. intrusive archaeological evaluation) to provide further information to inform the planning decision. It will also set out a strategy to appropriate mitigate the proposal's impacts on the archaeological resource, as necessary.

The heritage statement will, similarly suggest any mitigation measures considered necessary to eliminate or reduce any impact on the significance of designated heritage assets.

Assessment Criteria

Setting

The NPPF defines the setting of a heritage asset as: *'The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral'*

Historic England's *Historic Environment Good Practice Advice Planning Note 3 (Second Edition): The Setting of Heritage Assets* (2017) will be used to inform the methodology for this assessment which follows steps i) to iv) outlined in the guidance.

Significance

Paragraph 128 of the NPPF states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.

It is recognised that not all parts of a heritage asset will necessarily be of equal significance. In some cases, certain elements could accommodate change without affecting the significance of the asset. Change is only considered harmful if it erodes an asset's significance. Understanding the significance of any heritage assets affected and any

contribution made by their setting (paragraph 128, NPPF 2012) is therefore fundamental to understanding the scope for and acceptability of change.

Assessment of significance has been undertaken in accordance with the methodology outlined in Historic England's *Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment* (2015).

Consultation

Following completion of the archaeological desk based assessment a copy of the report will be submitted to the Norfolk Historic Environment Service (NHES), who act as advisors to South Norfolk Council. Discussions with NHES will identify the need for and scope of any further archaeological investigation needed to support the planning application and/or mitigate the impact of the development.

The heritage statement will be submitted to the conservation officer for South Norfolk Council.



Appendix 3 Green Infrastructure Strategy

**Greater Norwich Local Plan:
Call for Sites**

**Supporting Representation:
Green Infrastructure Strategy**

July 2016

Issue Sheet

Supporting Representation:
Green Infrastructure Strategy

July 2016

Prepared by:

Signature:

Name: Ian Reilly

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Date: 08 July 2016

Approved by:

Signature:

Name: Philip Atkinson

Title: Director

Date: 08 July 2016

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1 Introduction and Background

1.1 Instruction

1.1.1 Lanpro Services have been instructed to promote 18 strategic sites through the Greater Norwich Local Plan process.

1.1.2 As part of this instruction Lanpro Services have prepared separate representations on each site, however it was considered beneficial to also provide an overview of the strategic green infrastructure theme which has driven the identification and design of the sites.

1.2 Natural Environment and Rural Communities Act (2006)

1.2.1 Section 40 of the Natural Environment and Rural Communities Act 2006, places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity. A key purpose of this duty is to embed consideration of biodiversity as an integral part of policy and decision making throughout the public sector.

1.2.2 Section 40(1) imposes a duty to conserve biodiversity:

Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

1.2.3 Section 40(3) of the Act explains that:

Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

1.2.4 Therefore, the duty applies to all local authorities and extends beyond just conserving what is already there to carrying out, supporting and requiring actions that may also restore or enhance biodiversity.

1.3 Natural England 'Nature Nearby' Accessible Natural Greenspace Guidance (2010)

1.3.1 Released in 2010, Natural England's most up to date advice on accessible natural greenspace, this document detailed the social, economic and environmental importance of providing GI.

1.3.2 Natural England recognised that access to the natural environment through local green spaces varies widely across the country, and even within a single local authority area.

1.3.3 Natural England produced Accessible Natural Greenspace Standards (ANGSt) which it advised should be adopted by Local Authorities. It was envisaged that the adoption of ANGSt would redress imbalances in GI availability in local communities.

1.3.4 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.

1.4 The Natural Environment White Paper (2011)

1.4.1 The Government's Natural Environment White Paper, The Natural Choice: Securing the Value of Nature, refers to the role of planning in protecting and improving the natural environment and facilitating coherent and resilient ecological networks that reflect the value of natural systems.

1.4.2 Planning is considered to be a key element of the institutional framework that will achieve the objectives set out in the White Paper. The aims of the White Paper include halting biodiversity loss by 2020, supporting 'healthy functioning ecosystems', and establishing 'coherent ecological networks'.

1.4.3 The White Paper refers to the role of urban GI as completing 'the links in our national ecological network' and 'one of the most effective tools available to us in managing environmental risks such as flooding and heat waves'. It advocates that green spaces should be factored into the development of all communities.

1.5 DEFRA - Biodiversity 2020 (2011)

1.5.1 Department for Environment, Food and Rural Affairs (DEFRA) Biodiversity 2020 is a national strategy for England's wildlife and ecosystem services; it was published in summer 2011. It sets out the Government's ambition to halt overall loss of England's biodiversity by 2020, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.

1.5.2 The reform of the planning system was identified as key to reducing environmental pressure from planning and development, by taking 'a strategic approach to planning for nature' and by retaining 'the protection and improvement of the natural environment as core objectives of the planning system'. Priority action 3.4 of the Biodiversity Strategy sets out how the approach of the planning system will guide development to the best location, encourage greener design, and enhance natural networks.

1.6 NPPF (2012) and PPG

1.6.1 Central Government planning guidance contained in the NPPF advises that there are three dimensions to sustainable development; economic, social and environmental. The key to providing sustainable development is to ensure that all three are considered within planning decisions and plan making.

1.6.2 The NPPF (paras 6 and 17) identifies sustainable development as the purpose of the planning system and conserving and enhancing the natural environment as a 'core planning principle'. While specific policies on conserving and enhancing the natural environment are addressed in Section 11 of the NPPF, these should not be considered in isolation, as other natural environment related policies, and their consideration in plan and decision-making, can be found throughout the document, specifically in relation to GI (para. 99) and evidence-gathering (paras 165-168).

1.6.3 Paragraph 9 of the NPPF advises that pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life, including (but not limited to):

- making it easier for jobs to be created in cities, towns and villages;
- moving from a net loss of bio-diversity to achieving net gains for nature;
- replacing poor design with better design;
- improving the conditions in which people live, work, travel and take leisure; and
- widening the choice of high quality homes.

1.6.4 The objectives for the natural environment within the planning system are set out in the NPPF (in para. 109) and state that the 'planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils;
- recognising the wider benefits of ecosystem services;

- minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

- 1.6.5 The NPPF clearly supports the objectives set out in the Natural Environment White Paper by stressing a proactive and strategic approach to planning for the natural environment. The ambition of the NPPF is not just to retain protection for existing designations, but to plan ahead for re-creation of habitat where possible. The NPPF states (para. 114) that local planning authorities should 'set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure'.
- 1.6.6 Furthermore, the NPPF requires local authorities to 'plan for biodiversity at a landscape scale across local authority boundaries' and 'identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation' (para. 117).
- 1.6.7 The NPPF and Planning Practice Guidance define Green Infrastructure (GI) as a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.
- 1.6.8 Green Infrastructure (GI) is therefore an integral part of the sustainable development goal. GI ensures that there are net gains for biodiversity and that conditions are improved for leisure.
- 1.6.9 The creation of, and protection of, existing high quality publically accessible GI also adds value to the attractiveness of a location for business investment and for house builders.
- 1.6.10 It is a key requirement of the NPPF for Local Authorities to consider the role of GI within their plan making and decision taking; failure to do so would result in outcomes which could not be considered as sustainable development.
- 1.6.11 The NPPF is the first part of the planning vehicle to implement the requirements of Section 40 of the Natural Environment and Rural Communities Act 2006 and the aims of The Natural Environment White Paper (2011).
- 1.6.12 To find any part of a Development Plan sound it must fully reflect the policies of the NPPF. Therefore, GI and biodiversity requirements need to be filtered through to Local Authority development plan documents and act as a core consideration within decision taking and plan making.
- 1.6.13 The National Planning Policy Guidance (NPPG) defines Green Infrastructure as:
.....a network of multifunctional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.
Green infrastructure is not simply an alternative description for conventional open space. As a network it includes parks, open spaces, playing fields, woodlands, but also street trees, allotments and private gardens. It can also include streams, canals and other water bodies and features such as green roofs and walls.
- 1.6.14 The NPPG highlights that Green Infrastructure is important to the delivery of high quality sustainable development, alongside other forms of infrastructure such as transport, energy, waste and water.

- 1.6.15 Green Infrastructure is also recognised in the NPPG as providing multiple benefits, notably ecosystem services, at a range of scales, derived from natural systems and processes, for the individual, for society, the economy and the environment.
- 1.6.16 Furthermore the NPPG advises that to ensure that these benefits are delivered, green infrastructure must be well planned, designed and maintained. Green Infrastructure should, therefore, be a key consideration in both local plans and planning decisions.
- 1.6.17 The NPPG provides further clarification on how successful GI can help to deliver wider planning policy:

Building a strong, competitive economy

Green infrastructure can drive economic growth and regeneration, helping to create high quality environments which are attractive to businesses and investors.

Delivering a wide choice of high quality homes

Green infrastructure can help deliver quality of life and provide opportunities for recreation, social interaction and play in new and existing neighbourhoods. More broadly, green infrastructure exists within a wider landscape context and can reinforce and enhance local landscape character, contributing to a sense of place. Green infrastructure is also an important approach to delivering ecosystem services and ecological networks.

Requiring good design

Well-designed green infrastructure helps create a sense of place by responding to, and enhancing, local landscape character. Green infrastructure can also help create safe and accessible environments in new development and the regeneration of brownfield sites in existing built up areas.

Promoting healthy communities

Green infrastructure can improve public health and community wellbeing by improving environmental quality, providing opportunities for recreation and exercise and delivering mental and physical health benefits. Green infrastructure also helps reduce air pollution, noise and the impacts of extreme heat and extreme rainfall events.

Meeting the challenge of climate change, flooding and coastal change

Green infrastructure can help urban, rural and coastal communities mitigate the risks associated with climate change and adapt to its impacts by storing carbon; improving drainage (including the use of sustainable drainage systems) and managing flooding and water resources; improving water quality; reducing the urban heat-island effect and; where appropriate, supporting adaptive management in coastal areas. Green infrastructure networks also help species adapt to climate change by providing opportunities for movement.

Conserving and enhancing the natural environment

The components of green infrastructure exist within the wider landscape context and should enhance local landscape character and contribute to place-making. High quality networks of multifunctional green infrastructure provide a range of ecosystem services and can make a significant contribution to halting the decline in biodiversity.

2 Growth Considerations

2.1 SHMA

- 2.1.1 The Central Norfolk Strategic Housing Market Assessment (SHMA) issued in December 2015 identifies a Core Housing Market Area, a Greater Norwich Housing Market Area and a Central Norfolk Housing Market Area.

- 2.1.2 The SHMA identifies the objectively assessed need for the partner councils until 2036, ten years beyond the current JCS period.
- 2.1.3 The JCS required for 37,000 homes to be provided by 2026. The SHMA advises that a further 15,000 dwellings will be required between 2026 and 2036 within the districts of Norwich, South Norfolk and Broadland.
- 2.1.4 North Norfolk and Breckland Council are currently in the early stages of their Local Plan process, their plan periods will run from 2012 until 2036. The SHMA advises that the growth required in those districts will be circa 25,000 dwellings in that period.

2.2 Natura 2000 sites

- 2.2.1 Natura 2000 sites are considered to be Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and RAMSAR sites (internationally important wetland sites). It is a requirement of the Sustainability Appraisal, Habitats Regulations Assessment and Appropriate Assessment to consider the direct and indirect effects of population growth upon the integrity of these sites.
- 2.2.2 A major consideration of population growth is the visitor pressures placed on publically accessible Natura 2000 sites. These recreational pressures have been considered previously through the adoption of the JCS and the Norwich, South Norfolk and Broadland Council Local Plans. Many of the Natura 2000 sites had been scoped out through the sustainability appraisal scoping process as unlikely to be detrimentally impacted upon by the growth projections.
- 2.2.3 On-site open space provision, delivery of strategic GI through investment and specific allocations such as South Norfolk's Bawburgh Lakes site had been considered sufficient to mitigate against any impacts which were considered possible on those vulnerable Natura 2000 sites.
- 2.2.4 In Broadland the onsite open space policy requirements are considered by many developers to be onerous and at risk of making schemes unviable. The open space requirements which the Council are seeking are a direct result of concerns raised by Natural England regarding impacts on Natura 2000 sites.
- 2.2.5 South Norfolk Council are reliant on a strategy of creating access to the open countryside to ensure that population pressures do not impact negatively on protected sites. This strategy does not take into account that the open countryside is out of their control in terms of accessibility and quality of recreational standard, it also assumes that the average resident is fully aware of the rural footpath network. It should also be noted that the delivery of circa 70ha of publically accessible open space at the Bawburgh Lakes site has not made any progress in over ten years.
- 2.2.6 The strategies detailed above were devised to ensure that the Natura 2000 sites which had not been scoped out from the relevant sustainability appraisals would be protected. However, it is unclear if the scoping exercise undertaken by the Councils took account of the existing deficiency in natural and semi natural public open space which was evidenced in each Councils PPG17 study from 2007.
- 2.2.7 For example, the South Norfolk PPG17 study found that there were large scale deficiencies in the supply of publically accessible Natural and Semi-Natural Greenspace, specifically 200ha in the north west and south west of the District
- 2.2.8 The sustainability appraisal Scoping Report which accompanies the Call for Sites provides an understanding that there is a need to protect and enhance nationally and internationally protected nature conservation interests and geodiversity sites in and adjacent to the area, with particular emphasis on reducing visitor pressure on and improving water quality in Natura 2000 sites and the wider habitats of the Broads.
- 2.2.9 However, the scoping report repeats the oversight of the previous SA's undertaken for the Local Plan process. There is no acknowledgement that the visitor pressures from new development could be occurring because there is insufficient alternative natural greenspace available on site or close to their site due to the delivery of strategic GI not coming forward. This would

compound the evidenced existing problem of open space deficiencies which have not been identified or addressed correctly through the JCS, South Norfolk Local Plan or Broadland Local Plan.

2.2.10 Councils are not supplying sufficient accessible natural greenspace with a variety of environments to satisfy the visitor demands on Natura 2000 sites; which will increase further due to the proposed growth between now and 2036.

2.2.11 Therefore, it is considered that the scoping of impacts upon the Natura 2000 sites through the Appropriate Assessment, Sustainability Appraisal and Habitats Regulations Assessment needs to demonstrate that there is an understanding of the current open space deficiencies to ensure that the in combination effects of the projected growth plans are fully understood.

2.3 SANG

2.3.1 It is understood that Natural England consider there to be a 7.5km catchment area for publically accessible Natura 2000 sites. Therefore, increased visitor pressures which result from population growth within the 7.5km catchment area need to be considered within the scoping/sustainability exercise which accompanies the next iteration of the plan making process.

2.3.2 At present the spatial distribution of the projected growth is not fixed however what is known is that the designated sites have a catchment area which spreads across the majority of the three partner Council's areas.

2.3.3 Given the existing deficit in publically accessible natural and semi natural open space within Broadland and South Norfolk, the unsustainable/undeliverable mitigation being promoted through the respective Local Plans and the projected growth of the SHMA Councils it is apparent that suitable alternative natural greenspace (SANG) will need to be sought to avoid negative impacts being experienced at Natura 2000 sites.

2.3.4 The need for a variety of SANG's to be provided can be traced back to the evidence of the PPG17 studies carried out by the respective Council partners. These studies detailed that a range of opens spaces of natural and semi-natural open space needed to be provided for the district Councils to meet Natural England's ANGST recommendations.

2.3.5 These new spaces need to offer a variety of environments, provide for a range of walks, allow for car parking at the larger sites, and be located within the 7.5km Natura 2000 catchment area to provide for a successful SANG.

2.3.6 The long term management of the SANG can be offered to a variety of interested bodies ie Parish Council, District Council or Norfolk Wildlife Trust or it could be through a private management agreement.

3 Proposed Sites

3.1 Strategic Locations

3.1.1 Lanpro have been working with our clients to identify and secure sites which are within and adjacent to the NPA. These sites have been identified as they are within the buffer zone of the Norfolk Natura 2000 sites, they provide connections/enhancements to the JCS identified GI corridors and they are within easy reach of growth locations.

3.1.2 The mapping exercise which we have undertaken shows the quantum of GI which we are offering to act as SANG's in or adjacent to strategic growth locations. We would anticipate that these same locations will experience more growth through the new Greater Norwich Local Plan.

3.1.3 The plans detail clearly that all of our promoted sites are within the Natura 2000 buffer zones and when compared to the JCS Key diagram and GI corridor maps our sites have the potential to offer a range of opportunities for the Greater Norwich Local Plan.

3.2 Sustainable Developments

- 3.2.1 The provision of high quality GI within each promoted site has been given careful consideration. The GI will act as a benefit for the development and the surrounding locality in terms of its use, but we have also given consideration to the form of the development and its interaction with the wider landscape setting and characteristics.
- 3.2.2 The provision of GI at a rate which may be higher than the current policy requirements provides for opportunities to create high quality design outcomes in built and natural form terms.
- 3.2.3 The quantum of housing proposed at each site is appropriate to the size of the settlement which it would be related to. The biodiversity benefits which could also be introduced would ensure that each development truly provided for a net gain for the natural environment.
- 3.2.4 The developments can provide social gains through increased recreational and sporting opportunities which also lead to social inclusion gains.
- 3.2.5 The NPPG recognises that the provision of high quality GI can result in economic benefits for an area as it attracts investment in both housing and business.
- 3.2.6 The provision of these sites as proposed will ensure that the future growth plans for the Greater Norwich area will be more resilient to the potential for recreational pressures to impact on vulnerable designated and non-designated sites. Across the 18 sites 143ha of public open space can be created.

3.3 Deliverable and viable

- 3.3.1 As detailed on all of the separate submission forms we consider all of the promoted sites to be deliverable and viable. Detailed viability information can be provided but as stated in this representation previously Lanpro and their clients have identified and secured these promoted sites on the basis that the Greater Norwich area is in need of SANG's.
- 3.3.2 The majority of these sites can be taken forward immediately and the Greater Norwich Local Plan is therefore in a position to front load the provision of necessary GI to offset the recreational pressures which may occur through population growth, especially in the post 2026 period.

**Greater Norwich Local Plan:
Call for Sites**




**Supporting Representation:
Green Infrastructure Strategy**

**Appendix 1 –
Sites Location**



Note

SUMMARY

-  Norwich Policy Area
-  Existing Urban Areas
-  Proposed Sites

Area of Green Infrastructure

1. Sandhole Lane Park	5.83 Ha
2. Norwich Road Park I	6.37 Ha
3. Norwich Road Park II	5.09 Ha
4. Old Norwich Road Park	8.95 Ha
5. Holt Road Park	1.32 Ha
6. Rackheath Country Park	31.78 Ha
7. Poringland Road Park	1.02 Ha
8. Mulbarton Road Park	9.81 Ha
9. Little Melton Green Area	0.07 Ha
10. Little Melton Green Area	0.22 Ha
11. New Road Park I	3.08 Ha
12. New Road Park II	3.14 Ha
13. Caistor Country Park	24.47 Ha
14. Caistor Road Park	3.03 Ha
15. Barford Country Park	28.95 Ha
16. Long Lane Park	4.32 Ha
17. Brooke Green Area	0.76 Ha
18. Frettenham Park	4.80 Ha
Total	143.01 Ha

Map Data © Google 2015

PROJECT TITLE
Norwich Policy Area Green
Infrastructure Strategy

PROJECT NUMBER
GLA 001-0635

CLIENT

DRAWING TITLE
Sites Location

DRAWING NUMBER REV
001 -

SCALE
1/150000 (A3)

DATE
JUNE 2016

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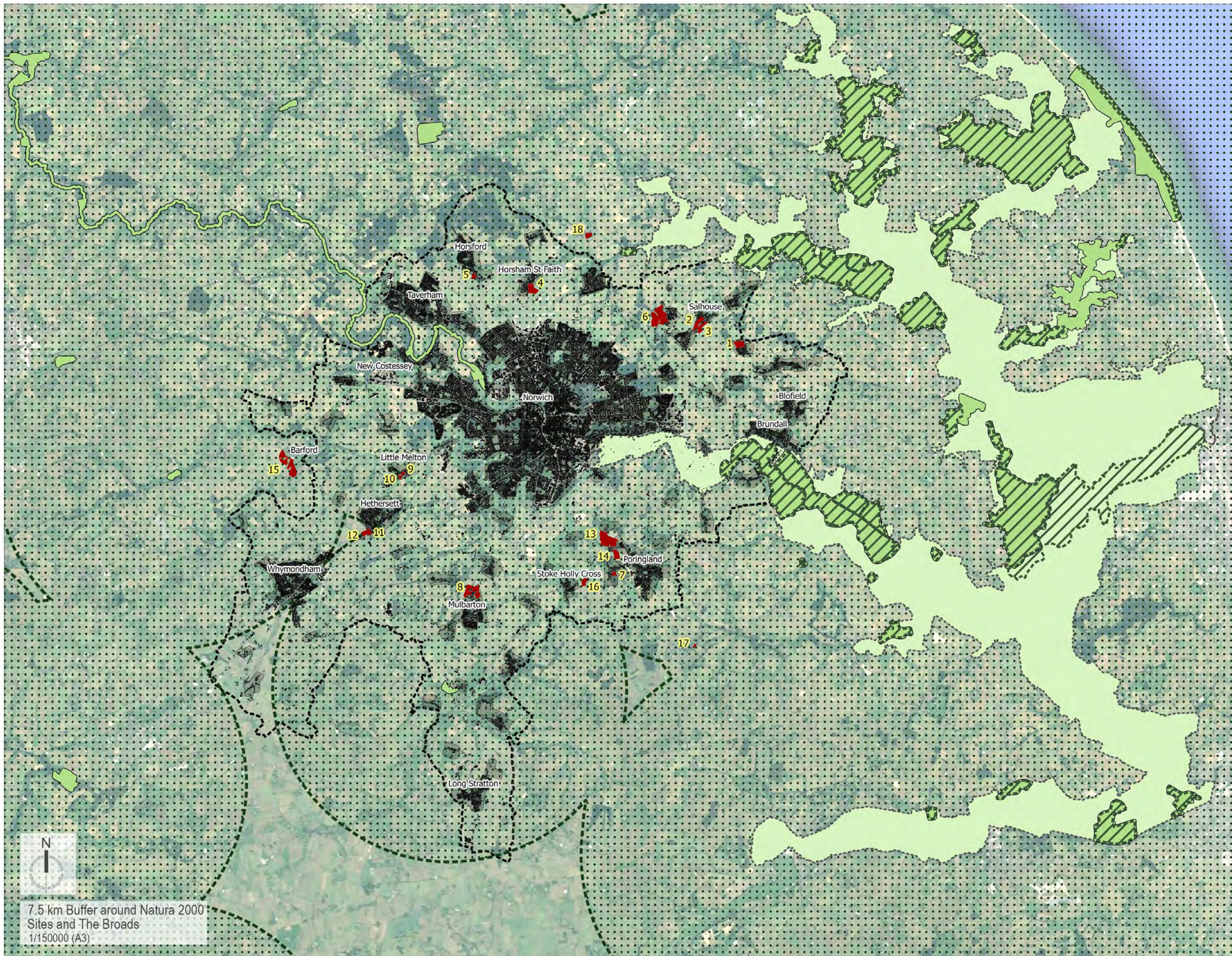


001 Site Location
1/150000 (A3)

**Greater Norwich Local Plan:
Call for Sites**

**Supporting Representation:
Green Infrastructure Strategy**

**Appendix 2 –
7.5 km Buffer around
Natura 2000 Sites and The Broads**



Note

SUMMARY

-  Norwich Policy Area
-  Existing Urban Areas
-  Proposed Sites
-  Special Protection Areas
-  Special Area of Conservation
-  The Broads
-  7.5 Km Buffer around SAC, SPA & The Broads

Map Data © Google 2015

PROJECT TITLE
Norwich Policy Area Green
Infrastructure Strategy

PROJECT NUMBER
GLA001-0635

CLIENT

DRAWING TITLE
7.5 km Buffer around Natura
2000 Sites and The Broads

DRAWING NUMBER REV
002 -

SCALE
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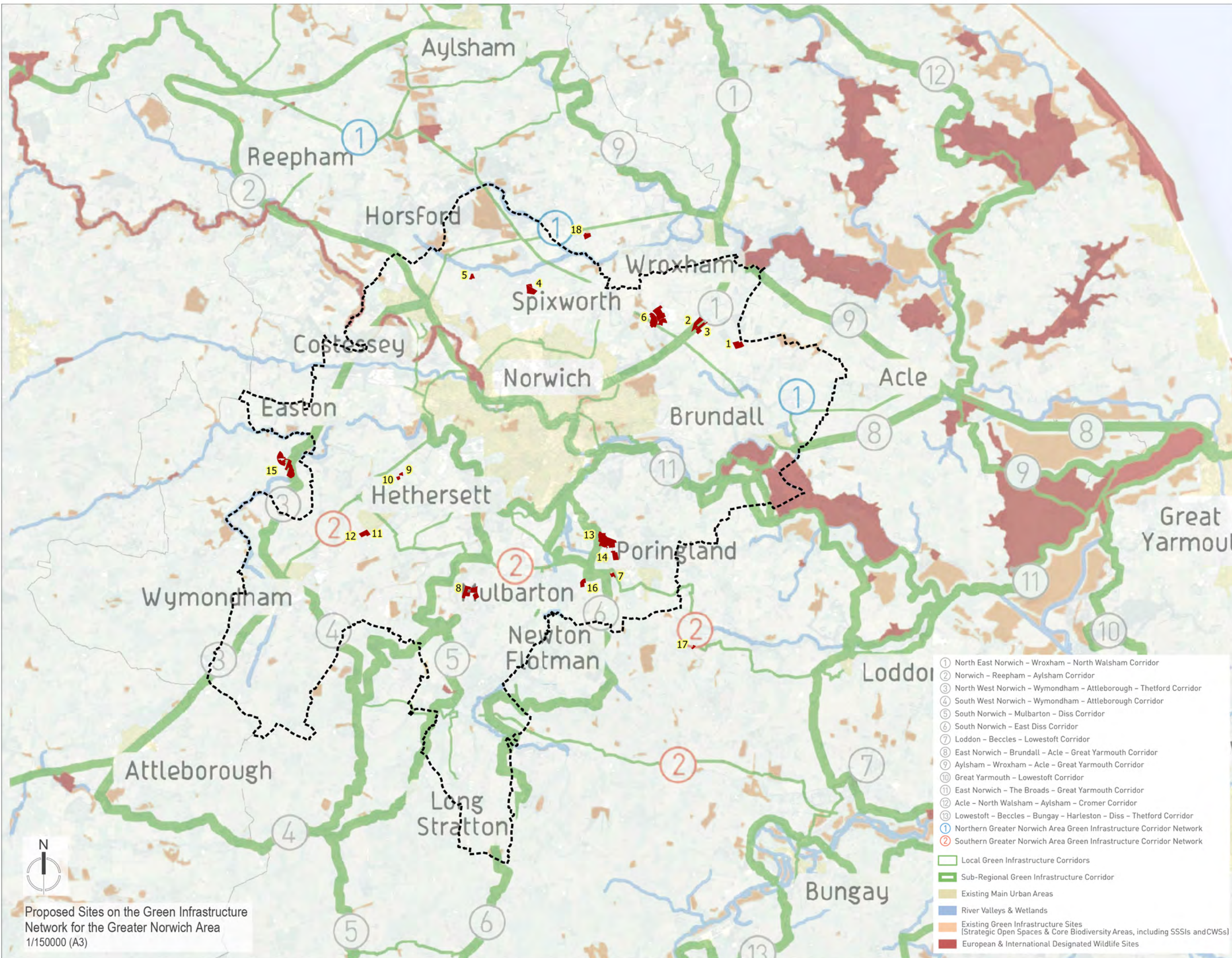


7.5 km Buffer around Natura 2000
Sites and The Broads
1/150000 (A3)

**Greater Norwich Local Plan:
Call for Sites**

**Supporting Representation:
Green Infrastructure Strategy**

**Appendix 3 -
Proposed Sites on the GI Network for
the Greater Norwich Area**



Proposed Sites on the Green Infrastructure Network for the Greater Norwich Area
1/150000 (A3)

Note

SUMMARY

- Norwich Policy Area
- Proposed Sites

The Map of the Green Infrastructure Network for the Greater Norwich Area has been extracted from the Joint Core Strategy for Norwich, Broadland, and South Norfolk (2014).

Map Data © Google 2015

PROJECT TITLE
Norwich Policy Area Green Infrastructure Strategy

PROJECT NUMBER
GLA001-0635
CLIENT

DRAWING TITLE
Proposed Sites on the Green Infrastructure Network for the Greater Norwich Area

DRAWING NUMBER
003

SCALE
1/150000 (A3)

DATE
JUNE 2016

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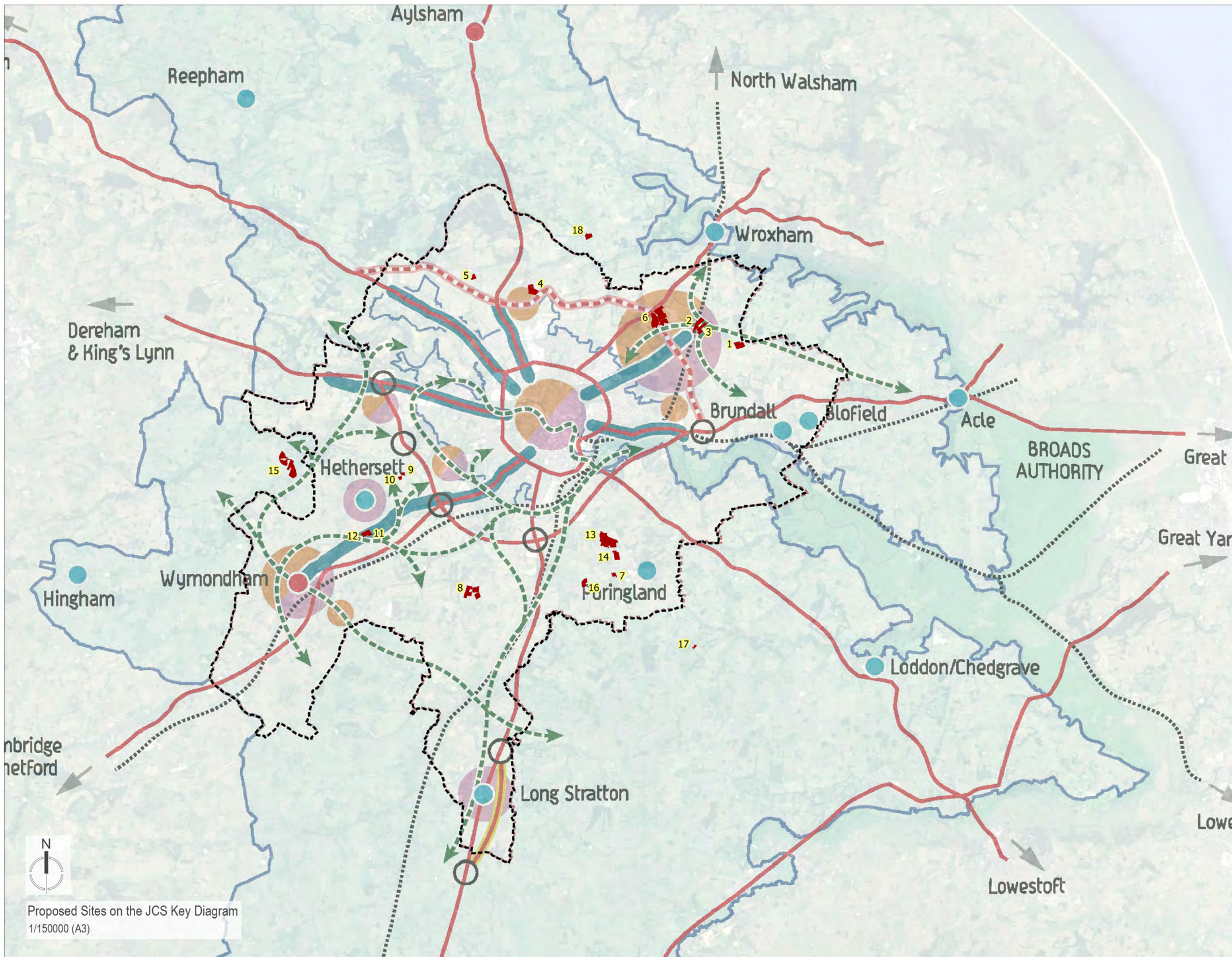
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- ① North East Norwich – Wroxham – North Walsham Corridor
 - ② Norwich – Reepham – Aylsham Corridor
 - ③ North West Norwich – Wymondham – Attleborough – Thetford Corridor
 - ④ South West Norwich – Wymondham – Attleborough Corridor
 - ⑤ South Norwich – Mulbarton – Diss Corridor
 - ⑥ South Norwich – East Diss Corridor
 - ⑦ Loddon – Beccles – Lowestoft Corridor
 - ⑧ East Norwich – Brundall – Acle – Great Yarmouth Corridor
 - ⑨ Aylsham – Wroxham – Acle – Great Yarmouth Corridor
 - ⑩ Great Yarmouth – Lowestoft Corridor
 - ⑪ East Norwich – The Broads – Great Yarmouth Corridor
 - ⑫ Acle – North Walsham – Aylsham – Cromer Corridor
 - ⑬ Lowestoft – Beccles – Bungay – Harleston – Diss – Thetford Corridor
 - ① Northern Greater Norwich Area Green Infrastructure Corridor Network
 - ② Southern Greater Norwich Area Green Infrastructure Corridor Network
- Local Green Infrastructure Corridors
 - Sub-Regional Green Infrastructure Corridor
 - Existing Main Urban Areas
 - River Valleys & Wetlands
 - Existing Green Infrastructure Sites [Strategic Open Spaces & Core Biodiversity Areas, including SSSIs and CWSs]
 - European & International Designated Wildlife Sites

**Greater Norwich Local Plan:
Call for Sites**

**Supporting Representation:
Green Infrastructure Strategy**

**Appendix 4 -
Proposed Sites on the
JCS Key Diagram**



- Note**
- SUMMARY**
- Proposed Sites
 - Joint Core Strategy Area
 - Norwich Policy Area
 - Norwich Urban Area
 - Broads Authority Area
 - Strategic Employment Sites
 - Major Housing Growth & Associated Facilities
 - Norwich Northern Distributor Road
 - Long Stratton Bypass
 - Major Junction Improvements
 - Bus Rapid Transit Corridor
 - Green Infrastructure Priority Corridors supporting key growth locations (Other Green Infrastructure opportunities throughout the area)
 - Main Towns
 - Key Service Centres
 - A Roads
 - Railways

The JCS Key Diagram Map has been extracted from the Joint Core Strategy for Norwich, Broadland, and South Norfolk (2014).
 Map Data © Google 2015

PROJECT TITLE
 Norwich Policy Area Green Infrastructure Strategy

PROJECT NUMBER
 GLA001-0635

CLIENT

DRAWING TITLE
 Proposed Sites on the JCS Key Diagram

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Proposed Sites on the JCS Key Diagram
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