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1. Introduction

- 1.1. This Statement has been prepared to accompany objections to the Solihull Local Plan Draft Submission Plan dated October 2020. It is submitted on behalf of the owners of Golden End Farms in relation to land at Golden End, Knowle, Solihull. The statement should be read alongside the submitted objections to the Draft Submission Plan.
- 1.2. This document provides information on our client's land and shows that the site provides a suitable, immediately deliverable and highly sustainable option for growth. It is our stated objection that the site should therefore be included as an additional housing allocation in the Local Plan.
- 1.3. The scope of this report is as follows:
 - The Opportunity at Golden End
 - Green Belt Assessment
 - Overview of other opportunities and constraints
 - Summary and conclusions

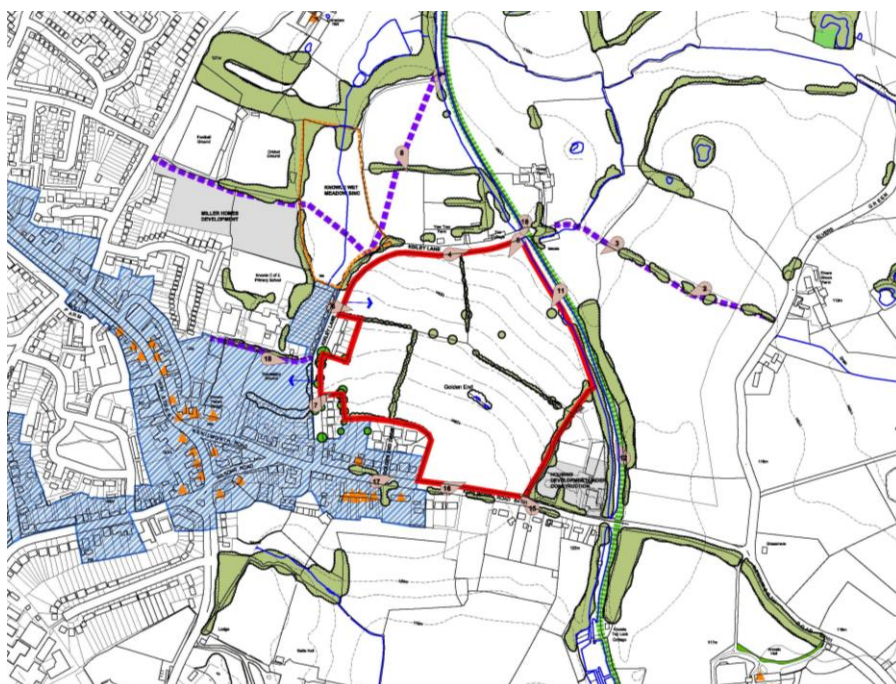
2. The Opportunity at Golden End

- 2.1. The land north of Kenilworth Road known as Golden End Farm is being promoted as an opportunity to provide an exemplar sustainable village expansion to help meet the Borough's housing needs. It is being promoted by the landowners, who are one of Knowle's oldest families.

The Site

- 2.2. The land in total extends to approximately 15 hectares (37 acres) and is bounded by Kenilworth Road to the south, by the Grand Union Canal to the east and by Kixley Lane to the west and north. A location plan of the site is provided within Appendix 1.
- 2.3. The site is well contained by permanent features including roads and the canal, which provide a long-term defensible boundary. Accordingly, its development would not expose further Green Belt areas around this part of the village to pressure for development. An overall assessment of the site's contribution towards the Green Belt is provided in Section 3 of this Statement.
- 2.4. The site is currently Grade 3 arable farmland. It is relatively level, although the land falls from west to east as it approaches the canal. As shown on the Constraints Plan (Appendix 2), the land is for the most part free of trees except for along the boundaries. Field hedges split the site into approximately 4 main parcels of land. Existing trees along Kixley Lane are protected by a TPO.

Figure 1: Site Constraints Plan (See Appendix 2 for full size version)



2.5. The site is by far the most accessible site to the village shops and community facilities of any of the possible growth locations around Knowle. It is located immediately east of Knowle Primary Academy, and within 5 minutes walk of the High Street. The site frontage on Kenilworth Road is serviced by a principal bus route from Solihull to Coventry and the site is also close to other bus routes servicing the village. This high level of accessibility has been recognised by the Accessibility Mapping Report dated September 2020 published in conjunction with the Draft Submission Plan, although we do dispute the scoring given which we believe should be even higher. This is discussed further in Section 4 of this Statement.

The Proposal

2.6. The site is suitable for a mix of market and affordable housing together with a significant component of green and blue infrastructure in the form of a new village park comprising of playing fields, ecological habitat, sustainable drainage features and a canal side walk/cycleway. A Concept Masterplan has been prepared as show below and included in full as Appendix 3.

Figure 2: Concept Masterplan (See Appendix 3 for full scale version)



2.7. The Concept Masterplan is landscape led and provides for the following:

- Protection of existing boundary hedges and trees;
- Protection of views from the public footpath network to Knowle church;

- Protection of the area of nature conservation north of Kixley Lane;
 - Opportunity for a new village park including new playing fields, public open space, sustainable drainage features and ecological habitat;
 - Opportunity to create new pedestrian/cycle routes across the site linking to the adjacent public footpath network, including a new canal-side walk along the western bank which does not currently exist along this section of the canal;
 - Opportunity to provide coach turning facilities and off street car parking on Kixley Lane, helping to relieve existing congestion issues associated with Knowle Primary Academy, as well as providing additional public parking close to the village.
 - Opportunity to provide a walker's car park close to the canal bridge to relieve parking pressures by Knowle Locks.
- 2.8. The developable area identified through the Concept Masterplan is some 9 hectares (22 acres). This could provide for at least 250 homes. A site of this size would provide the opportunity to cater for the full range of housing needs, from starter homes and live-work units, through to accommodation for the elderly and bungalows. It is proposed that the site could be developed to the highest environmental credentials using the latest sustainable/low carbon designs.
- 2.9. The remaining 6 hectares (15 acres) of the site would be given over to the green and blue infrastructure described above.
- 2.10. Vehicular access to the site would be taken from Kenilworth Road. Kixley Lane would not be used for vehicular access except possibly for emergency vehicles if such was required.
- 2.11. Pedestrian access would be provided to ensure maximum connectivity between the site, the village and the adjoining countryside. It is envisaged that 3 pedestrian access points would be provided off Kenilworth Road; one at the western edge of the site, one at the eastern edge and one at the vehicular access. Pedestrian access would also be provided via Kixley Lane, and also to the canal. The site would therefore be highly permeable.

3. Green Belt Assessment

- 3.1. As part of the evidence base for the Local Plan Review, the Council commissioned a Strategic Green Belt Assessment. This was undertaken by Atkins and is dated July 2016.
- 3.2. The Green Belt Assessment divided the Borough into 'refined land parcels' at the edge of the urban area and villages, together with a number of broader areas beyond the settlement boundaries. An assessment was then undertaken of these refined land parcels and broad areas against the purposes of including land within Green Belt as set out in the National Planning Policy Framework (NPPF).
- 3.3. The site at Golden End was included in the Assessment within Refined Parcel 37 (RP37), which is defined by Hampton Road to the north, the Grand Union Canal to the east, Kenilworth Road to the south and the built-up edge of Knowle to the west.
- 3.4. The Green Belt Assessment scoring matrix then compares all parcels using scores from 1 to 3 with 3 being high performing parcels, 2 being moderately performing parcels and 1 being lower scoring parcels. In the Assessment RP37 scores 3 (high) against Green Belt Purpose 1 (checking unrestricted sprawl of large built-up areas), Purpose 3 (assisting in safeguarding the countryside from encroachment), and Purpose 4 (preserve the setting and special character of historic towns). In relation to Purpose 2 (preventing neighbouring towns merging into one another) it scores 2 (moderate). The Assessment does not compare parcels against Purpose 5 (assisting in urban regeneration) as they all score the same given the fact they are all greenfield.
- 3.5. The Atkins Green Belt Assessment contains some serious flaws in regard to the land at Golden End with regard to both the drawing of the refined parcel boundary and also aspects of the detailed assessment. We have raised these issues throughout the consultation stages on the plan. As a direct consequence the assessment results in regard to the land at Golden End have resulted in a higher scoring than should have been the case and in turn this has to date unfairly mitigated against the site being considered for an allocation in the Local Plan Review.
- 3.6. The principal error in the Atkins Assessment is the way in which RP37 was drawn up and the absence of any recognition that the southern section between Kixley Lane and Kenilworth Road (principally comprising Golden End Farm and the redeveloped former Sunnymount Nursing Home site) has very different characteristics from the section north of Kixley Lane up to Hampton Road. The Golden End part of RP37 is essentially a 15 hectare triangle of open arable farmland with ribbon development along Kenilworth

Road and Kixley Lane framing much of it on 2 sides and the canal framing the third. It should have been identified as a refined parcel in its own right or, at the very least, the subsequent assessment should have recognised the different characteristics within the parcel. The area north of Kixley Lane in contrast comprises for the most part of the local wildlife site with its wildflower meadows and trees and the extensive wooded grounds of the listed Grimshaw Hall. It has a much reduced connection with the adjacent settlement and a far more rural feel.

- 3.7. Within this context, we have reviewed the Atkins Assessment in detail below.

Revised Assessment against the five purposes of Green Belt

Purpose 1: To check the unrestricted sprawl of large built-up areas

- 3.8. The Atkins Green Belt Assessment concluded that RP37 scored highly (Score 3) for Purpose 1. The criteria used for the assessment is the degree to which the site is contained, and the extent to which ribbon and other development exists that is detached from the existing built up area. Where such exists, this is an indication that the parcel is lower performing. Durable permanent boundaries are considered to include roads and other infrastructure, and permanent natural features such as watercourses.
- 3.9. The subsequent assessment then proceeds to treat the entire RP37 area as if it is the same, and makes no attempt to distinguish between the Golden End section south of Kixley Lane and the northern section. If it had done so, it would have clearly identified that Kenilworth Road and Kixley Lane already contain significant historic ribbon development. Furthermore, Kenilworth Road continues to change its character even today with the recent redevelopment of the former Sunnymount Nursing Home adjacent to the canal which has left the frontage of the Golden End site forming a wide infill between Golden End Close and these new houses. Furthermore, the southern side of Kenilworth Road is also still changing following the recent planning approval for 2 houses in the limited gap immediately opposite the Golden End site.
- 3.10. Given the extent of ribbon development influencing the character of the Golden End site and the degree to which it is contained by this ribbon development and the canal it is clearly apparent that this area is lower performing in terms of Purpose 1. Indeed, removal of the site from the Green Belt would establish a new and very clearly identifiable long term defensible boundary to the Green Belt formed by the canal and the 2 roads, thus restricting further urban sprawl of the built-up area to the east of Knowle.

- 3.11. It is of significant note that the Site Assessment Document produced by Solihull MBC (Re-issue dated November 2020) fully agrees with our position and acknowledges this flaw in the 2016 Atkins Assessment where in the concluding commentary for the Golden End Site (Ref site 59) it states:

“The site itself is well contained by Kixley Lane, Kenilworth Road and the Canal, and these strong physical features would serve to establish a logical boundary, defining the extent of land to be removed from the Green Belt. Whilst it is recognised that the site lies within a parcel of land that performs highly in Green Belt terms as a whole, it is acknowledged that the site is a smaller part of the wider parcel and that built development is present in the immediate vicinity with ribbon development along Kixley Lane and Kenilworth Road”

- 3.12. Given the above and using the Atkins Criteria we therefore conclude that this southern part of the parcel containing the Golden End site is a lower performing area of Green Belt and should be attributed a score under this Purpose of 1, not 3.

Purpose 2: To prevent neighbouring towns from merging into one another

- 3.13. The Green Belt Assessment for Purpose 2 scored RP37 moderately (Score 2). The criteria used for the assessment is the size of the gap between main settlements, with gaps of between 1 and 5 km resulting in a moderate score and gaps over 5km resulting in a low score. In the case of RP37 the assessment states that the parcel falls in a gap of ‘approximately 4 km’ between Knowle and Balsall Common. The size of the gap does of course depend on where you measure it from but if you take the site as being within the gap the measurement has to be taken from approximately Golden End Drive in Knowle to the western extremity of Balsall Common at Magpie Lane which is 4.8km, so actually closer to 5km.

- 3.14. Overall therefore using the Atkins Methodology RP37 does score moderately against Purpose 2 but it should be noted that this is very marginal and the parcel is actually at the very low end of moderate.

Purpose 3: To assist in safeguarding the countryside from encroachment

- 3.15. The Green Belt Assessment for Purpose 3 scored RP37 high (Score 3). The Atkins criteria to meet a high score is that the parcel is characterised by countryside, adjoins countryside and does not contain any development. The Atkins assessment for RP37 states there is no development present. This is another clear error given the fact that within the parcel there are houses along

Kixley Lane and on the redeveloped former Sunnymount Nursery site on Kenilworth Road, together with the large listed Grimshaw Hall off Hampton Road and its associated collection of buildings and cottages.

- 3.16. When assessed correctly it is clear therefore that this parcel should be under a moderate scoring (2) which is defined as a parcel that is generally characterised by countryside, is adjoined by countryside and/or has limited development present. This describes the RP37 parcel well given it is mostly open fields but with some limited development present.

Purpose 4: To preserve the setting and special character of historic towns

- 3.17. The Green Belt Assessment for Purpose 4 scored RP37 high (Score 3). The Atkins criteria to meet a high score is where the parcel is adjacent to a Conservation Area within a historic town and where there are clear views of landmarks.
- 3.18. It is agreed in this case that Parcel RP37 meets the Atkins scoring criteria given it is adjacent to the Conservation Area and there are some views of landmarks.
- 3.19. It should however be noted that the Concept Masterplan provided with this Statement demonstrates that the Golden End site can be developed in a manner so as to preserve the setting of the adjacent conservation area and key views. This can be achieved through the retention of existing boundary features, and avoiding built development on the northern part of the site. This northern area can be retained for public open space, sustainable drainage and ecological mitigation. This is clearly demonstrated through the Concept Masterplan.

Purpose 5: To assist in urban regeneration by encouraging the recycling of derelict and other urban land

- 3.20. With regard to purpose 5, we agree with the Atkins Green Belt Assessment that the site scores highly against this purpose in common with all the other Green Belt release sites in the Local Plan. No scoring is given by Atkins under this Purpose as all the sites are the same.

Summary and Conclusions

- 3.21. Contrary to the findings of the 2016 Strategic Green Belt Assessment, we consider that the Golden End site performs a more limited green belt role than the wider RP37 parcel and using the Atkins criteria has an overall score of 8 out of 12, rather than 11. The November 2020 Solihull MBC Site assessment Summary for Golden End concurs with this conclusion.

- 3.22. Having established the contribution a site makes to the Green Belt, the next step should be to consider it alongside other factors. The advice in paragraph 84 of the NPPF makes clear that *“when drawing up or reviewing Green Belt boundaries local planning authorities should take account of the need to promote sustainable patterns of development”*.
- 3.23. The following section of this Statement considers these other factors and the degree to which the site would promote sustainable pattern of development.

4. Summary of Opportunities and Constraints

4.1. As with any development site, there are a range of environmental and technical considerations that need to be considered as part of any development allocation. The following section of this document identifies those aspects that need to be considered. Known baseline conditions, the data required to assess impacts and the scope for any mitigation measures are discussed. The key issues for this development will be:

- Land ownership and availability;
- Transport;
- Landscape and visual;
- Ecology;
- Archaeology and cultural heritage;
- Flood risk and drainage; and
- Ground conditions.

Land Ownership and Availability

4.2. The site is available and in single ownership and with no agricultural tenancy restrictions. The site owners have been overwhelmed with interest from developers expressing interest in developing the site should it be selected through the Local Plan. It is therefore immediately available and deliverable to the market and would contribute to housing supply in the early years of the Local Plan. This is in direct contrast to the allocations currently selected for Knowle, Sites KN1 and KN2, both of which have availability and deliverability challenges and are unlikely to provide a significant contribution to housing numbers in the early years of the plan.

Transport

4.3. The site is by far the most accessible site within Knowle, with easy access to the village shops and community facilities. It is located immediately east of Knowle Primary Academy, and within 5 minutes walk of the High Street. It is also directly serviced by the bus route from Solihull to Coventry and is an easy walk to the other bus routes serving the village. This high level of accessibility has been recognised by the Accessibility Mapping Report dated September 2020 published in conjunction with the Draft Submission Plan, although we do dispute the scoring given which we believe should be even higher as that report has not taken into account the new bus stops recently installed on Kenilworth Road. Had these been taken into account we conclude the site would have received the maximum scoring and is therefore

one of the highest scoring sites for accessibility in the Borough, and certainly in the Knowle, Dorridge, Bentley Heath area.

- 4.4. In terms of vehicular access and highway capacity, this Statement is supported by a Transport Report attached as Appendix 4 which demonstrates that a vehicular access can be safely formed off Kenilworth Road. In relation to the wider network, it also concludes that the impact of additional traffic from the development when added to existing traffic conditions will be relatively modest and there are no perceived major network constraints that would prevent the site's development. It includes a discussion as to potential network capacity improvements around the junctions of Kenilworth Road, Wilsons Road and Warwick Road which would be assessed in detail as part of any planning application. Such potential network improvements mirror those identified in the 2020 Knowle Transport Study evidence paper produced by Mott MacDonald for Solihull MBC.

Landscape and Visual

- 4.5. As is demonstrated through the Concept Masterplan provided with this Statement, the site is capable of satisfactorily accommodating new development in a manner that minimises the impact on the landscape character of the area and the visual impact from surrounding areas. This is important to the landowners given their long relationship with the village.
- 4.6. The site contains an existing framework of vegetation along all of its boundaries which will be retained other than where access is required. Furthermore, the green infrastructure proposed on the northern part of the site provides an opportunity to help the development assimilate into the landscape and the countryside beyond.
- 4.7. It is nevertheless inevitable that any development around the edge of a settlement such as Knowle will have a degree of landscape and visual impact. These impacts will need to be fully considered at planning application stage to ensure any site design mitigates any impacts as far as possible. A preliminary appraisal of the landscape and visual impact issues is provided within Appendix 5.

Ecology

- 4.8. At the outset of the local plan review process in 2016 an Extended Phase 1 Habitat Survey was undertaken to consider the possible ecological impacts of developing the site. A copy of the survey is included as Appendix 6 to this statement.
- 4.9. The survey shows that the site is dominated by arable farmland under continuous cultivation, which is of low interest to wildlife. The hedges and

trees around the field boundaries provide potentially suitable nesting/roosting habitat for birds and bats and the adjacent canal offers suitable foraging habitat for bats. The survey also recorded some evidence of badger activity on the site. These are all considerations that can be further investigated through species-specific surveys at planning application stage to identify appropriate mitigation measures. They do not present significant constraints to the site's development.

- 4.10. With regard to the proximity of the local wildlife site (LWS) immediately to the north of Kixley Lane, the extensive green infrastructure proposed for the northern part of the site will ensure that an appropriate buffer is provided to protect the integrity of the LWS, and indeed to enhance it. The canal side walk along the eastern boundary will also provide a buffer to protect the canal wildlife corridor and the new green infrastructure areas will in general provide opportunities for biodiversity net gain through the proposal.

Archaeology and Cultural Heritage

- 4.11. The site is located immediately to the east of Knowle Conservation Area and close to a number of listed buildings. A full heritage impact assessment would be carried out as part of any detailed site assessment but it is not considered that there are any significant constraints that could not be overcome through sensitive design and careful layout of the site. Of great importance, the views of Knowle Church tower from the Canal and the public footpath network will be protected by the restriction of any built development within that northern vista and the use of that part of the site solely for green and blue infrastructure.

Flood Risk and Drainage

- 4.12. The site lies within Flood Zone 1 (low risk) and therefore is not at risk of flooding.
- 4.13. As with any development of this scale, detailed proposals will have to be developed in due course to accommodate the necessary foul and surface water drainage, and detailed strategies to address any impacts will be required. The principles of sustainable urban drainage systems (SUDS) will be incorporated into any design. At this stage it is not envisaged that there are any constraints that would prevent acceptable drainage solutions from being achieved.

Ground Conditions

The site has historically been used for agriculture and has no known contamination or ground suitability restrictions to its development.

5. Summary and Conclusions

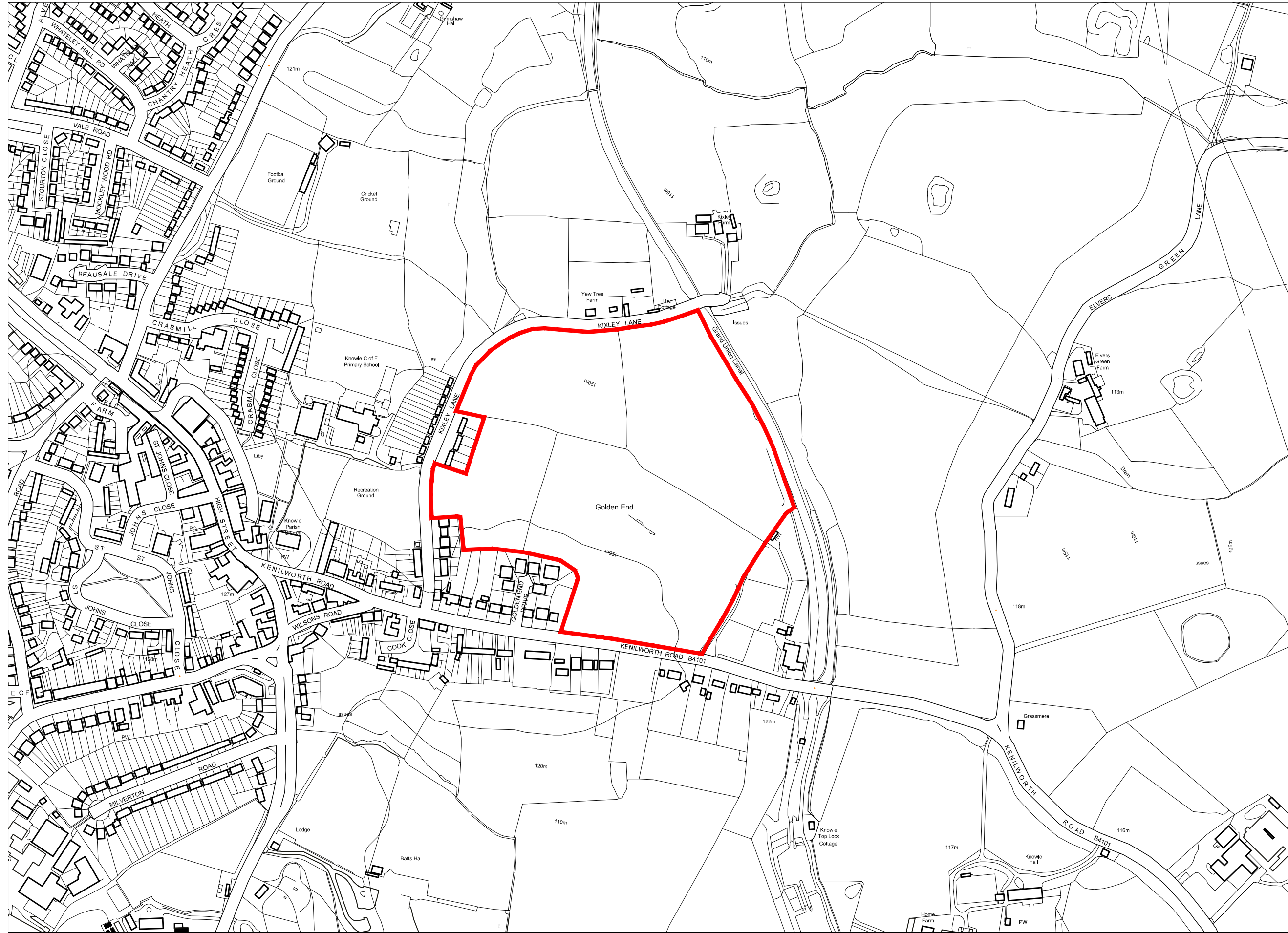
- 5.1. This document has been prepared to support representations to the Solihull Local Plan Review Draft Submission Plan. It sets out why land at Golden End in Knowle should be selected as an allocated site.
- 5.2. Land at Golden End, north of Kenilworth Road, is the closest available site to the centre of the village. It is immediately adjacent to the primary school and within 5 minutes walk of the high street. It is on a bus route with newly installed bus stops close to the site access.
- 5.3. The site is well contained with very limited ecological interest. The landscape contribution of the site can largely be retained and enhanced through the creation of parkland and playing fields on the northern half of the site.
- 5.4. The site offers long term defensible boundaries so as not to set any unwanted precedents for future expansion of the village in this location. It can also be planned so as to protect the setting of adjacent heritage assets.
- 5.5. The sites contribution to the purposes of Green Belt is lower than suggested in the Atkins 2016 Green Belt Assessment, and its contribution is more moderate than stated. This is fully acknowledged by the Council in its 2020 Site Assessment. Furthermore, Paragraph 84 of the NPPF notes that Green Belt contribution is not the only factor that should be considered when redrawing Green belt boundaries. The wider sustainability credentials of a site should also be considered. In this regard the site scores extremely well.
- 5.6. Furthermore, the site is immediately available and deliverable with strong developer interest. There are no technical or land ownership constraints.
- 5.7. A Concept Masterplan for the site has been prepared and shows that the site could provide the following:
 - Opportunity for at least 250 dwellings including a significant proportion of affordable homes. The site could accommodate the full range of housing needs from starter homes and live-work units through to housing for the elderly;
 - Opportunity to develop a scheme of the highest environmental credentials and using the latest sustainable/low carbon designs;
 - Opportunity for 6 hectares (15 acres) of new public open space and parkland, including playing fields, a new canal side walk, sustainable drainage features and ecological habitats;
 - Vehicular access would be from Kenilworth Road. Kixley Lane would not be used for access except possibly for emergency vehicles;

- Opportunity to improve parking facilities and coach access to Knowle Primary Academy, helping to relieve parking issues on Kixley Lane;
- Opportunity to provide a walker's car park close to the canal bridge to relieve parking pressures by Knowle Locks;
- Significant levels of pedestrian connectivity between the site, the village and the surrounding countryside;
- Protection of existing boundary trees and hedges;
- Protection of views from the public footpath network to Knowle Church;
- Protection of the area of nature conservation north of Kixley Lane.

5.8. It is concluded that the site offers the most sustainable pattern of growth in Knowle and should be included as an allocation in the Local Plan to contribute towards the Borough's housing growth requirements.

Appendix 1

NOTES



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CLIENT
GOLDEN END FARMS LTD

PROJECT
**GOLDEN END,
KNOWLE, SOLIHULL**

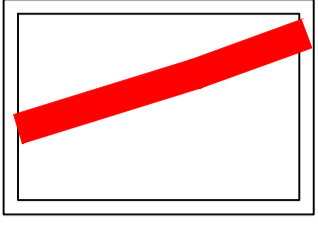
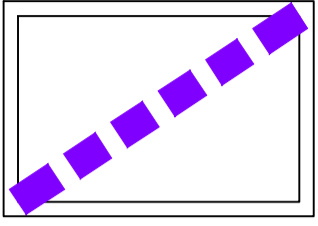
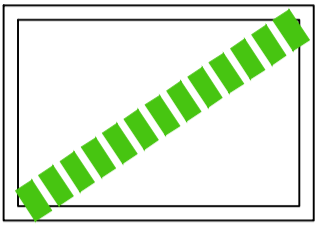
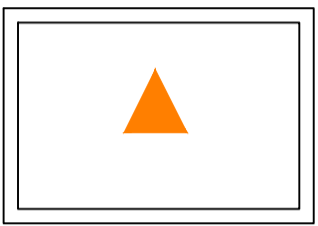
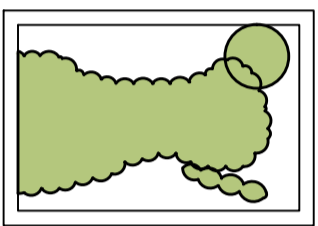
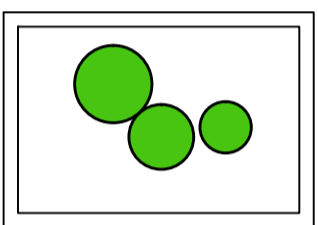
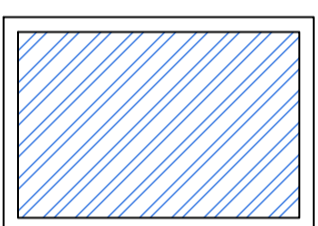
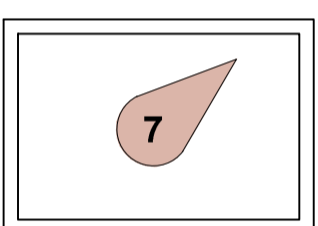
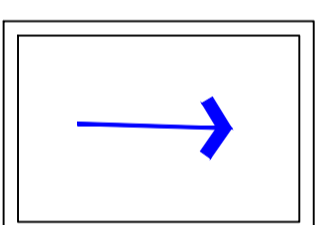
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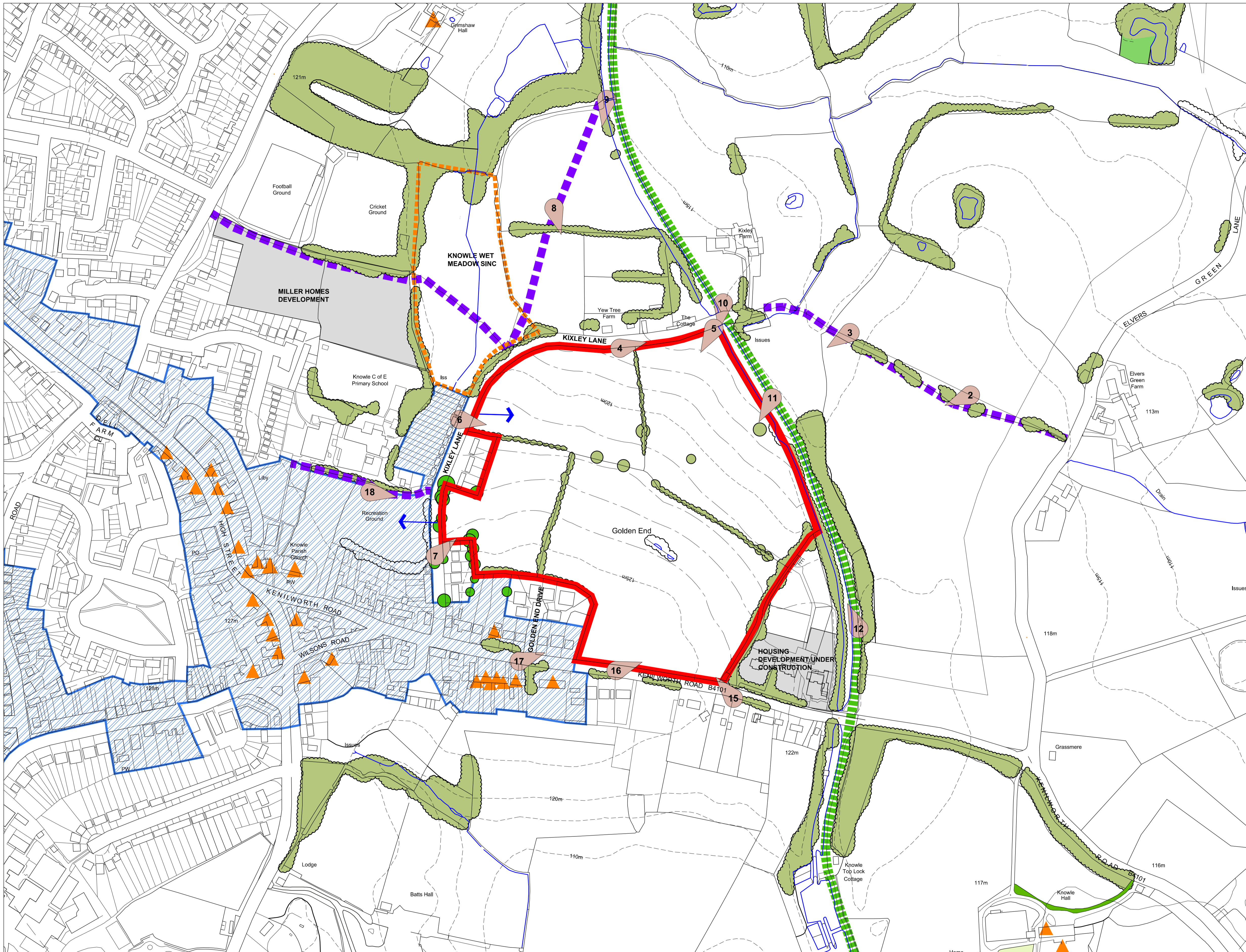
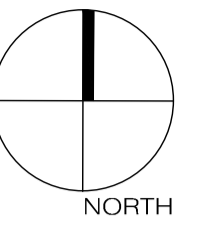
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Appendix 2

KEY

-  SITE BOUNDARY
-  PUBLIC FOOTPATHS
-  LONG DISTANCE PATH
Grand Union Canal
-  LISTED BUILDINGS
-  WOODLAND, TREES AND HEDGEROWS
-  TREES WITH TREE
PRESERVATION ORDERS (TPO)
-  KNOWLE CONSERVATION AREA
-  LOCATION OF PHOTO VIEWPOINT
-  NOTABLE VIEWS FROM KIXLEY
LANE REFERRED TO IN KNOWLE
CONSERVATION AREA
APPRAISAL



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GOLDEN END FARMS

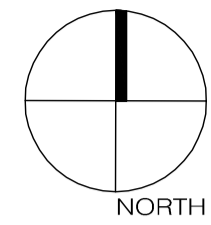
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**GOLDEN END FARM
KNOWLE**

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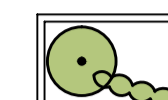




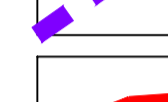
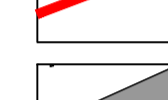

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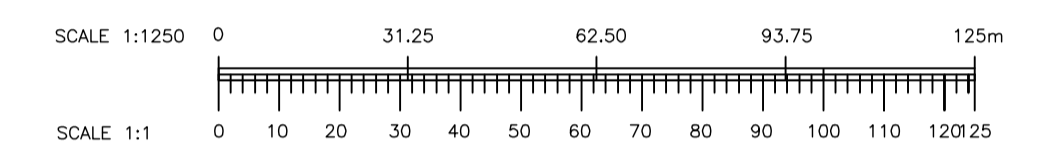
Appendix 3

NOTES



KEY

-  EXISTING TREES AND HEDGEROWS TO BE RETAINED AND PROTECTED
-  PROPOSED BLOCKS OF INFRASTRUCTURE PLANTING TO DEFINE AREAS AND PROVIDE SCREENING
-  PROPOSED INFRASTRUCTURE TREE PLANTING
-  PROPOSED GREENWAY INFRASTRUCTURE ROUTES PROVIDE CONNECTIVITY ACROSS SITE
-  PROPOSED FOOTPATHS PROVIDE LINKS ACROSS SITE TO PUBLIC RIGHTS OF WAY NETWORK BEYOND SITE
-  SITE BOUNDARY
-  INFRASTRUCTURE ROADS
-  MINOR ROADS



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CLIENT
GOLDEN END FARMS LTD.

PROJECT
GOLDEN END, KNOWLE, SOLIHULL

DRAWING
PRELIMINARY MASTERPLAN

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Appendix 4



BETTER SOLUTIONS, INTELLIGENTLY ENGINEERED

TRANSPORT & INFRASTRUCTURE PLANNING

Golden End Farm

Golden End,
Kenilworth Road, Knowle, Solihull

Transport Strategy

TRANSPORT & INFRASTRUCTURE PLANNING

Golden End Farm

Golden End,
Kenilworth Road, Knowle, Solihull

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1. INTRODUCTION

Background & Purpose of this Report

- 1.1 BWB Consulting (BWB) has been appointed by Golden End Farms to provide a preliminary Transport Strategy to support the delivery of a potential residential development of approximately 250 dwellings (Use Class C3) seeking allocation in the Local Plan, on Land off Kenilworth Road, Golden End, Knowle.
- 1.2 This Transport Strategy (TS) considers the potential transport and highways impact of the proposals including the impact of the development generated person trips, the safety of the surrounding road network and the implications for public transport, pedestrian and cyclist movements.
- 1.3 This TS is therefore, structured as follows:
 - **Section 2: Existing Conditions** – Describes the local highway network and the existing sustainable travel facilities
 - **Section 3: Development Proposals** – Provides details of the proposed development, access arrangements, parking provision and how the site will be services;
 - **Section 4: Trip Generation, Distribution and Traffic Impact** – Quantifies the estimated trip generation and highway impact of the development proposals;
 - **Section 5: Summary and Conclusion** – Summarises the findings of the report and offers conclusions in relation to the proposed development impact.

Consultation

- 1.4 This Transport Strategy has been informed by consultation with SMBC as local highway authority to agree an appropriate number of vehicular accesses to serve the proposed development as part of both the 2015 Transport Strategy and this submission.
- 1.5 Consultation was undertaken to demonstrate that one all-movement vehicular access to the proposed development would be sufficient. SMBC subsequently confirmed their 'preference' for an emergency access to be allowed for. This would be considered further as part of any future planning application as appropriate. However, based on the site frontage and context, opportunities are available to implement an emergency access if required.
- 1.6 Furthermore, consultation with the local highway authority has confirmed that traffic surveys are not required at this stage. However, fresh surveys will be required as part of any future planning application.

2. EXISTING CONDITIONS

Site Location

- 2.1 The proposed development is located on the eastern edge of Knowle, Solihull. The site is currently undeveloped, forming agricultural land and is bound by Kenilworth Road (B4101) to the south, residential dwellings to the west, agricultural land to the north and the Grand Union Canal to the east. **Figure 1** below displays the indicative location of the proposed development.

Figure 1. Site Location



Site Access

- 2.2 The existing vehicular access to the site forms a gated dropped kerb footway crossing access on the southern edge of the site boundary. As the existing access is only suitable for agricultural purposes, we will be looking to improve the access by widening for a new bellmouth access. **Figure 2** presents the existing site access.

Figure 2. Existing Site Access



Highway Layout

2.3 Kenilworth Road (B4101) located on the southern edge of the site boundary forming a single carriageway road which is subject to a 30mph speed limit. The road runs in east to west direction and has a carriageway width of approximately 6 metres. A footway is present on the northern side of the carriageway which measures approximately a minimum 2 metres in width, is well maintained and lit throughout the stretch of the road. The footway links the site with an existing extensive pedestrian footway network which routes into Knowle.

2.4 **Figure 3** presents Kenilworth Road along site frontage.

Figure 3. Kenilworth Road (B4101) Along Site Frontage



- 2.5 Kenilworth Road enables travel to the centre of Knowle village located to the west of the site, providing access to the local amenities as well as connection to the local villages of Dorridge, Bentley Heath and Solihull further west.

High Street

- 2.6 It is worth highlighting that as part of the local Council's emergency measures, vehicle speeds at High Street, Knowle have been temporarily reduced to 20mph. The measures have been put in place in order to create safer environment for people visiting the retail and commercial facilities in Knowle.
- 2.7 BWB Consulting, who have been a part of consultation process, have expressed support for the scheme highlighting three types of motivation for implementing a 20mph speed limit within the local area:
- Transport-related: items such as casualty reduction and reducing the negative impact of cars in urban centres
 - Community or politically driven: items such as community concerns about speeds and;
 - Health related: items such as encouraging active travel.
- 2.8 It is understood that while this measure is currently only 'temporary' in nature, the scheme has been extended indefinitely and there is wide support for this to be made permanent.

Existing Public Transport Infrastructure

- 2.9 The Guidelines for Planning for Public Transport in Developments, states that "*generally walking distances to bus stops in urban areas should be a maximum of 400m and*

preferably no more than 300m". However, the Buses in Urban Developments¹ guidance advises a more rigorous approach to catchment area planning as displayed in **Table 1**.

Table 1. Recommended Maximum Walking Distances to Bus Stops

Situation	Maximum Walking Distance
Core bus corridors with two or more high-frequency services	500m
Single high-frequency routes (every 12 minutes or better)	400m
Less frequent routes	300m
Town/city centres	250m

- 2.10 The closest existing bus stops are located on Kenilworth Road approximately 150-200m (approximately 2-3 minutes' walk) to the east of the existing site access (or c425-475m from the centre of the site). Bus services 87, 87A and 88A can be accessed at those bus stops.
- 2.11 Furthermore, there are further bus stops located approximately 550 metres (approximately 7 minutes' walk) west of the site located at Kenilworth Road west and High Street. These bus stops offer additional services across the region.
- 2.12 The services, timetables and bus frequency can be found within **Table 2** below.

Table 2: Summary of Weekday Bus Service

Service number and route	First Service		Last Service		Daytime Frequency
	'Inbound' Route	'Outbound' Route	'Inbound' Route	'Outbound' Route	
A8 via Dorridge Station – South Solihull Circular	07:17	06:25	22:35	21:45	30 mins (peak periods) – 60 mins
87 Coventry – Solihull via Balsall Common	07:32	6:20	18:32	18:15	60mins
88/88A Grovefield Crescent - Solihull	07:28	08:15	17:32	18:19	120mins
233 Solihull – Kenilworth via Dorridge railway station	One service a day leaving Solihull at 10:25 reaching Kenilworth at 11:05		One service a day leaving Kenilworth at 13:45 reaching Solihull at 14:25		1 per day

- 2.13 Dorridge Railway Station is also located approximately 2.5km south of the proposed site, accessible by bus and benefits from cycle stands. As such, Dorridge Railway Station could be accessed by cyclists as part of a multi modal trip. Dorridge Railway Station benefits from regular rail services into and out from Birmingham with a daytime frequency of approximately 15-20 minutes, as well as occasional services in the direction of London.

¹ Buses in Urban Developments, Chartered Institution of Highways and Transportation, 2018

3. DEVELOPMENT PROPOSAL

Introduction

- 3.1 The proposal form approximately 250 residential dwellings (Use Class C3) on land off Kenilworth Road (B4101) Knowle, Solihull, West Midlands.

Site Access

- 3.2 It is proposed that the vehicular access to the development site will be provided from Kenilworth Road (B4101), in roughly the same location as the existing farm access where the principal of access has already been established. The proposals form a priority-controlled T-junction which will include a 5.5 metres wide carriageway, 8 metres wide kerb radii and 2 metres wide footway on both sides of the carriageway. The footways will adjoin the existing pedestrian infrastructure at Kenilworth Road. A pedestrian/cycle link will also be made to the east of Kixley Lane, linking into the centre via the existing footpath between the school and the church.
- 3.3 As outlined within Section 2, Kenilworth Road is subject to a 30mph speed limit within vicinity of the site. However, as a robust assessment, visibility splays of 2.4m by 120m, in accordance with the Design Manual for Roads and Bridges (DMRB) guidance for 40mph vehicle speeds, have been implemented. However, it is important to highlight that roads which have a speed of 30mph require a visibility of 43 metres in according with Manual for Streets (MfS) guidance.
- 3.4 Drawing **GEK-BWB-HML-XX-DR-TR-100_S2 P1** provides an outline to the proposed access.
- 3.5 Furthermore, drawing **GEK-BWB-HGN-XX-DR-TR-110_S2 P1** presents swept path analysis which has been completed for the proposed site access. The drawing shows that both a large car as well as a 4-axle refuge vehicle, can enter and exit the proposed site comfortably.
- 3.6 Planning application PL/2019/02974/PPFL for the construction of two dwellings opposite the proposed site was granted in May 2020. The access for which forms a private drive opposite the existing field access to the proposed development site. Due to the very low number of movements associated with two units, the potential for conflict is minimal and as such, the proposed development access proposals are considered sufficient. However, it is also noted that due to the extensive site frontage with Kenilworth Road, there is the potential to re-locate the site access if required as part of any future planning application.
- 3.7 In addition to the site access, an emergency access with a width of 3.8 metres (in accordance with MfS design standards) could be implemented either further along the frontage of Kenilworth Road or from Kixley Lane, if required. This access would have restricted permeability (i.e. for pedestrians/cyclists only) but provide access for emergency vehicles in the unlikely event that the Kenilworth Road (B4101) became blocked due to an accident or other similar scenario.

4. TRIP GENERATION, DISTRIBUTION AND TRAFFIC IMPACT

Trip Generation

- 4.1 This section presents the forecast vehicle trip rates and resultant trip generation associated with the development site.
- 4.2 In order to determine the number of vehicular trips generated by the proposed development, land use “03 – Residential – A – Houses Privately Owned” of TRICS database were examined. Secondary filtering of “Suburban Area” and “Edge of Town”, with 100 to 300 dwellings was set between dates of 01/01/12 and 19/11/19 for all sites in England (excluding Greater London). Any weekend surveys were also excluded.
- 4.3 The data gathered a total of 23 site surveys. The results of the search are included within **Appendix 1**. The resultant level of traffic which would be generated by the development as a result is outlined within **Table 3** below.

Table 3. TRICS Generation Rates for Residential Uses - Vehicle Trips per Dwelling (250 units)

Peak Hour	Trip Rates			Trip Generation		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
AM Peak (08:00 – 09:00)	0.140	0.367	0.507	35	92	127
PM Peak (17:00 – 18:00)	0.343	0.160	0.503	86	40	126

- 4.4 The above table summarises the total expected trips that would be generated by the site and it shows that 127 and 126 two-way vehicle trips are forecast to be made within morning and evening peak hours respectively.
- 4.5 As part of the historic 2015 study for the site, trip rates were obtained from the Hampton Road residential development agreed with SMBC (*David Tucker Associates 31st October 2012 – SKP/JB 13141-03_TA Rev A*). These are presented in **Table 4**.

Table 4. TRICS Generation Rates for Residential Uses – Hampton Road Residential Development Site Agreed Rates - Vehicle Trips per Dwelling (250 units)

Peak Hour	Trip Rates			Trip Generation		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
AM Peak (08:00 – 09:00)	0.165	0.430	0.595	41	108	149
PM Peak (17:00 – 18:00)	0.410	0.242	0.652	103	61	164

- 4.6 The above table summarises the total expected trips that would be generated by the site and it shows that 149 and 164 two-way vehicle trips are forecast to be made within morning and evening peak hours respectively.
- 4.7 For the purposes of this assessment, as a robust assessment, the higher (historical) trip rates which were agreed for the Hampton Road residential development site have been used for this study.

- 4.8 It should be noted that the assessment does not account for the existing low traffic levels of traffic generation due to COVID-19 restrictions.

Traffic Data and Trip Distribution

- 4.9 The traffic data used for the purpose of this assessment has been taken from the historic WYG transport strategy (2015) for the development site. The traffic data outlined within the WYG study was based on data collected in 2009 within the Turner Lowe Associates Transport Assessment to accompany the Waitrose food store planning application (*Transport Assessment 09302 26th February 2010*). The 2015 'base' flows have then been growthed to a 2020 base and 2023 assessment year.
- 4.10 It should be noted that this data subsequently does not account for the existing, lower levels of traffic as a result of Covid related restrictions and increased home working. Subsequently, this data represents a robust baseline assessment of potential traffic levels. It is recommended that new ATC's are undertaken should the application progress to the planning application stage, to enable more accurate estimation of traffic flows within the vicinity of the site. These surveys would pick up a more accurate representation of post-Covid traffic conditions near the site
- 4.11 Journey Work (JTW) 2011 Census data (MSOA Solihull 026) has subsequently been used in order to determine approximate distribution of traffic generated by the proposed development. This indicates that roughly 85% of traffic will arrive and depart to the west and the remaining 15% of traffic will arrive and depart from the east. This also results in 68% routing north onto High Street and 17% routing south via Wilsons Road.
- 4.12 It should be noted that outlined that traffic surveys will require updating. However, due to ongoing COVID-19 local lockdown restrictions, the local authority has advised that traffic surveys are completed in near future, after the restrictions are lifted of to provide an actual traffic levels within the area of the site.

Assessment Years

- 4.13 The following assessment years have been selected:
- Base Year (2020)
 - Future Year (2023)
- 4.14 The assessments of the above years include the weekday peak hours of the local highway network as determined from the traffic surveys, these are 08:00 – 09:00 and 17:00 – 18:00.

Traffic Growth Factors

- 4.15 Traffic growth factors have been applied to the surveyed peak hour traffic flows for the aforementioned assessment years.
- 4.16 TEMPro 7.2 has been used to determine local traffic growth factors by interrogating National Transport Model (NTM) datasets on traffic along with consideration of local

assumptions regarding housing and employment growth. This is the standardised approach to estimating traffic flows in the future.

- 4.17 The Middle-layer Super Output Area (MSOA) of 'Solihull 026' were chosen as the geographic area of interest as the application site is located within this.
- 4.18 For the interrogation of the TEMPRO database the growth rates for 'car drivers only' were selected with the trip end type being defined as 'origin/destination'. Trip rates were obtained for the weekday morning and evening peaks (0700-0959 & 1600-1859).
- 4.19 Unit M4 of the Traffic Analysis Guidance (TAG) indicates in Section 9 that NTM growth forecasts should be adjusted using NTEM (National Trip End Model) data to tailor the published traffic forecast to local circumstances. Subsequently, an 'rural' area 'principal' road type adjustment has been applied to the resultant TEMPro growth factors produced.
- 4.20 A full summary of the TEMPRO growth factors used is shown in **Table 5**.

Table 5. TEMPRO Factors

Period	AM Peak (08:00 – 09:00)	PM Peak (17:00 – 18:00)
2015-2020	1.065248 (7%)	1.065506 (7%)
2015-2023	1.082397 (8%)	1.082706 (8%)

Traffic Impacts and Demand Strategy

- 4.21 It has been estimated that the proposed development will generate up to approximately 149 and 164 two-way vehicular trips in the morning and evening peaks respectively. In order to provide a robust assessment of the trip impact on the local highway network, an estimation data of 75% of traffic from the west and 25% of traffic from the east has been used during both peaks. **Figure 4**, **Figure 5** and **Figure 6** within figures section provides an outline to proposed traffic distribution and flows within the vicinity of the site.
- 4.22 Furthermore, to provide additional context of potential impacts of development trips on key junctions surrounding the local area, a further assessment has been undertaken. **Table 6** and **Table 7** below present the anticipated percentage impact of the development related traffic flows, during the morning and evening peak hours.

Table 6. Potential Development Trip Percentage Impact - 2020

Link/ Junction	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	2020 Base Two-way Traffic Flows	Potential Two-way Development Flows	% Impact	2020 Base Two-way Traffic Flows	Potential Two-way Development Flows	% Impact
Kenilworth Road (E of Site Access)	1160	22	1.9%	1208	24	2.0%

Kenilworth Road (W of Site Access)	1160	127	11.0%	1208	140	11.6%
Wilsons Road/ High Street	1799	25	1.4%	1990	28	1.4%
Kenilworth Road/ High Street	1709	102	6.0%	1737	112	6.4%

Table 7. Potential Development Trip Percentage Impact - 2023

Link/ Junction	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	2020 Base Two-way Traffic Flows	Potential Two-way Develop ment Flows	% Impact	2020 Base Two-way Traffic Flows	Potential Two-way Develop ment Flows	% Impact
Kenilworth Road (E of Site Access)	1179	22	1.9%	1227	24	2.0%
Kenilworth Road (W of Site Access)	1179	127	10.8%	1227	140	11.4%
Wilsons Road/ High Street	1828	25	1.4%	2021	28	1.4%
Kenilworth Road/ High Street	1737	102	5.9%	1764	112	6.4%

- 4.23 **Table 6** and **Table 7** show that the development will have a negligible impact on Kenilworth Road (E) and Wilson Road/High Street (S), with the increase in traffic not likely to be perceivable due to daily variation in traffic flows.
- 4.24 However, it is understood that there is anecdotal evidence of existing traffic issues on Kenilworth Road, due to short section of parking in front of the local church effectively narrowing the road to single lane use. Subsequently, consideration can be made as part of any future potential planning application for a TRO (Traffic Regulation Order) on this short stretch of road, either to remove the parking or make this section one way.
- 4.25 It should also be noted that potential improvement works have been identified within the Knowle Transport Study (October 2020) along Knowle High Street and Kenilworth Road. This includes potential removal of existing on-street parking Knowle Parish Church and potential signalisation of the High Street/Station Road/Wilsons Road junction. Subsequently, these schemes are likely to alleviate any potential highway impact concerns the proposals might result in.
- 4.26 Notwithstanding this, the traffic impact on both Kenilworth Road (W) and High Street (N) are also low and subsequently not likely to have a significant or severe impact on the operation of these roads. Furthermore, Knowle village also forms a local conservation area and so balanced approach should be taken in order to avoid any potentially unnecessary works.
- 4.27 Operational assessments of the site access and Kenilworth Road/High Street could be undertaken as part of any future planning application, if required by the local highway

authority. However, for the purposes of initial site allocation and based on the above, the development is considered viable in principal.

- 4.28 Should the site progress, then the viability of potentially increasing the daytime frequency of bus service 87 can also be examined as part of any future planning application, if required in consultation with SMBC and the local bus operator. This, in combination with a Travel Plan which could be submitted as part of any future planning application, would further promote sustainable travel modes and reduce the developments reliance on single occupancy vehicle trips.

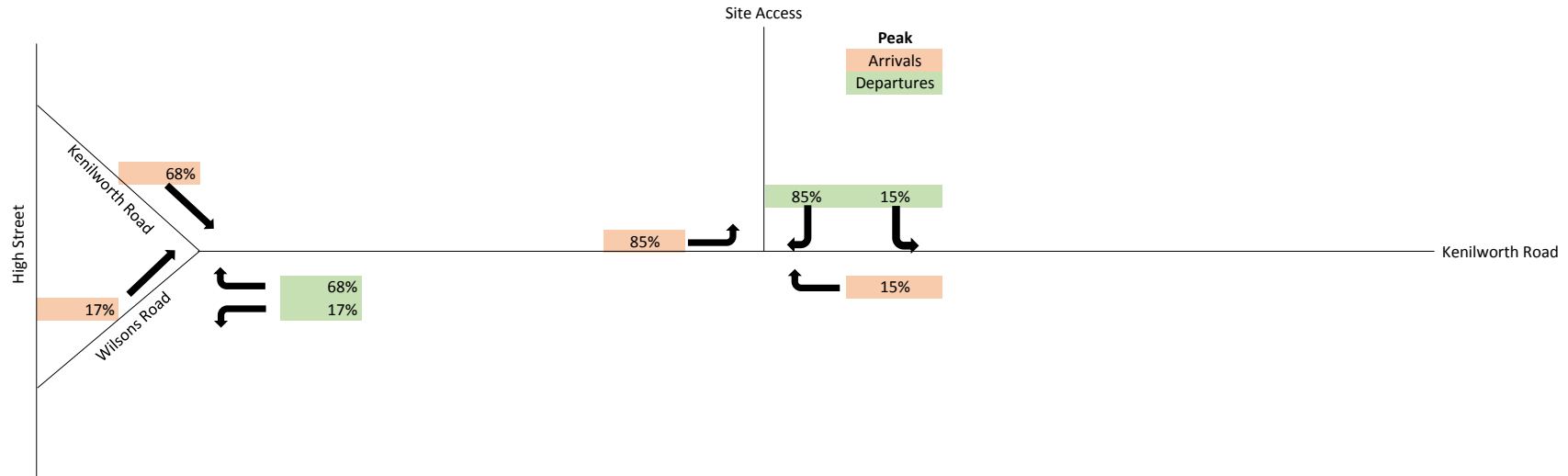
5. SUMMARY AND CONCLUSION

Summary

- 5.1 BWB Consulting (BWB) has been appointed by Golden End Farms to provide a preliminary Transport Strategy to support the delivery of a potential residential development of approximately 250 dwellings (Use Class C3) seeking allocation in the Local Plan, on Land off Kenilworth Road, Golden End, Knowle.
- 5.2 The site is located in a sustainable location, with Knowle High Street and bus stops with frequent services within close proximity of the site. Furthermore, Dorridge Railway Station which benefits from frequent services into Birmingham, is located within cycling distance of the site and could be used as part of multi-modal journeys.
- 5.3 This development proposals are forecast to generate up to approximately 149 two-way movements in the AM Peak and 164 two-way movements in the PM peak. Any future planning application would likely be accompanied by a Travel Plan which would also look to reduce the sites dependency on single occupancy vehicles and maximise the use of sustainable modes of transport.
- 5.4 Previous consultation with Solihull Metropolitan Borough Council (SMBC) has confirmed that for the scale of development proposed, a sole vehicular access would be sufficient, likely to be accompanied by an emergency access, subject to further consultation should the site progress. Pedestrian/cycle access would then be provided from both Kenilworth Road and Kixley Lane.
- 5.5 This assessment has shown that there are no fundamental issues which would result in the development proposals being undeliverable, based on the data currently available. Furthermore, improvements could be made to the existing nearby bus services to facilitate the development proposals if required. Subsequently, the site is considered deliverable in principal, subject to a comprehensive assessment (likely to form a Transport Assessment and Travel Plan) which would form any future planning application.
- 5.6 Furthermore, paragraph 32 of the National Planning Policy Framework (NPPF) states that 'Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe' the development as proposed is not envisaged to cause severe impact on the local highway network.
- 5.7 Consequently, under the guidelines set out in the National Planning Policy Framework, the proposals represent sustainable development and should be acceptable in highways terms.

FIGURES

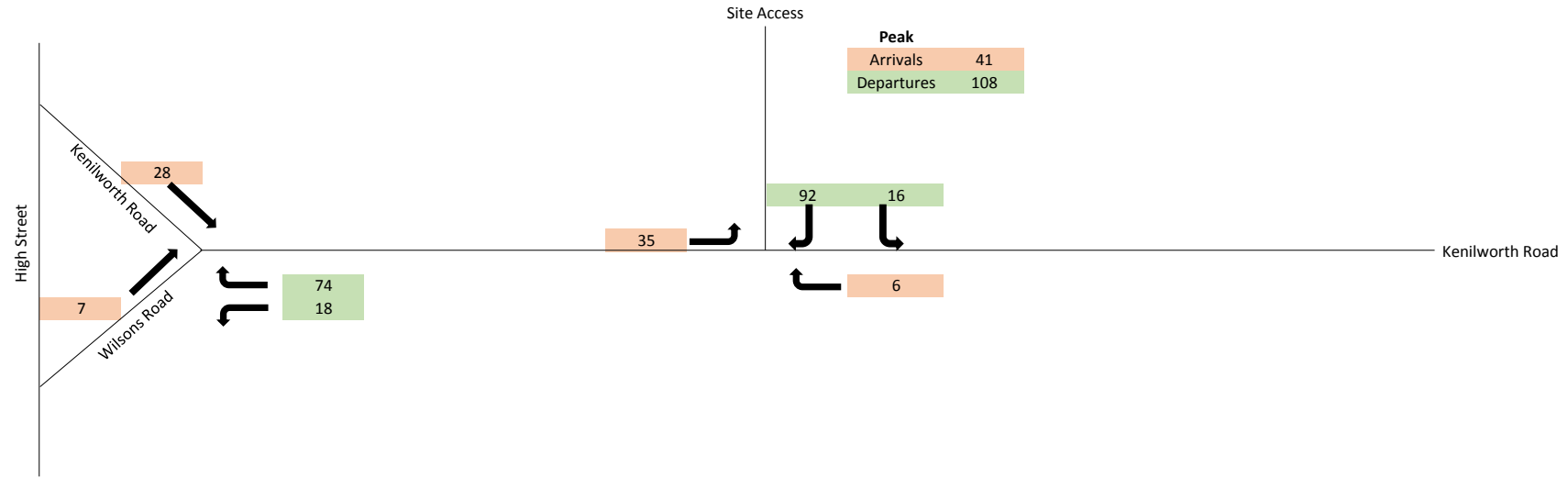
Traffic Distribution



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Project		Golden End Farm, Knowle, Solihull, West Midlands			
Drawn	KB	Approved	LT	Project No.	BMT2524
Checked	LT	Date	24.09.20	Scale	NTS
				FIGURE 4	Rev. 1

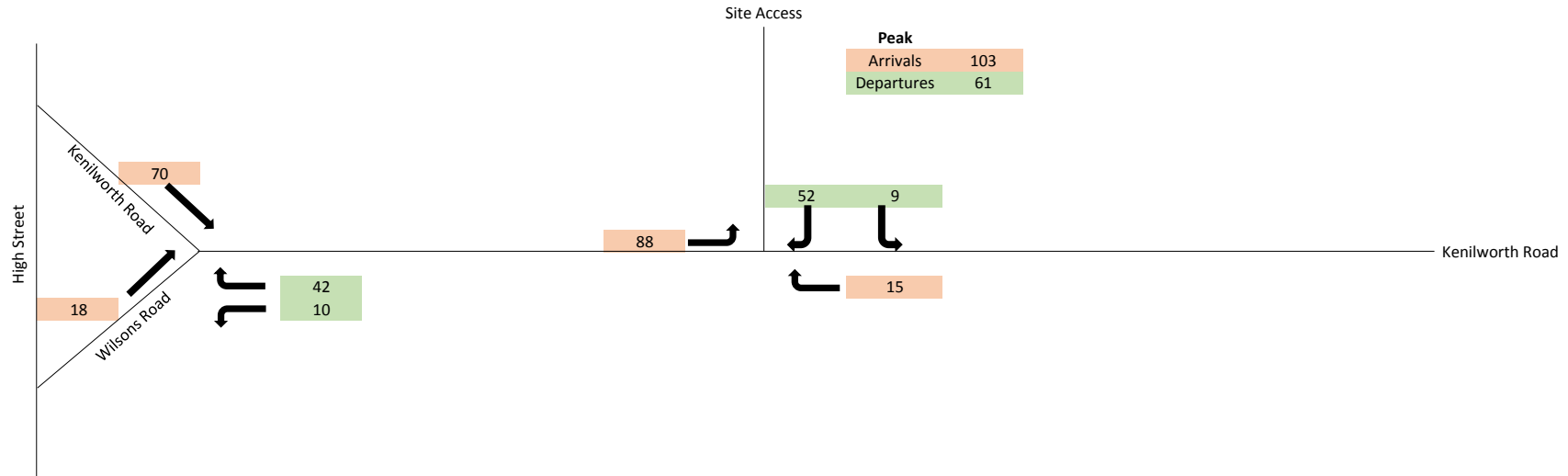
Site Traffic Assignment in the Morning Peak (08:00 - 09:00)



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Project		Golden End Farm, Knowle, Solihull, West Midlands				
Drawn	KB	Approved	LT	Project No.	BMT2524	
Checked	LT	Date	24.09.20	Scale	NTS	
				FIGURE 5	Rev. 1	

Site Traffic Assignment in the Evening Peak (17:00-18:00)



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Project		Golden End Farm, Knowle, Solihull, West Midlands			
Drawn	KB	Approved	LT	Project No.	BMT2524
Checked	LT	Date	24.09.20	Scale	NTS
				FIGURE 6	Rev. 1

APPENDICES

APPENDIX 1: TRICS Data Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	2 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 102 to 288 (units:)
 Range Selected by User: 100 to 300 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 23/09/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	4 days
Tuesday	1 days
Wednesday	2 days
Thursday	3 days
Friday	3 days
Saturday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	13 days
Directional ATC Count	1 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	12

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	14
------------------	----

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village,

Secondary Filtering selection:

Use Class:

C3 14 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	1 days
5,001 to 10,000	4 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	6 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	10 days
1.6 to 2.0	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	7 days
No	7 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	14 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 116 <i>Survey date: FRIDAY 25/09/15</i>		
	<i>Survey Type: MANUAL</i>		
2	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 212 <i>Survey date: MONDAY 11/07/16</i>		
	<i>Survey Type: MANUAL</i>		
3	ES-03-A-04 NEW LYDD ROAD CAMBER	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 134 <i>Survey date: FRIDAY 15/07/16</i>		
	<i>Survey Type: MANUAL</i>		
4	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 160 <i>Survey date: MONDAY 08/07/19</i>		
	<i>Survey Type: MANUAL</i>		
5	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON	SEMI -DETACHED & TERRACED	KENT
	Edge of Town Residential Zone Total No of Dwellings: 110 <i>Survey date: FRIDAY 22/09/17</i>		
	<i>Survey Type: MANUAL</i>		
6	KC-03-A-07 RECVLVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone Total No of Dwellings: 288 <i>Survey date: WEDNESDAY 27/09/17</i>		
	<i>Survey Type: MANUAL</i>		
7	NF-03-A-06 BEAUFORT WAY GREAT YARMOUTH BRADWELL	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 275 <i>Survey date: MONDAY 23/09/19</i>		
	<i>Survey Type: MANUAL</i>		
8	NF-03-A-16 NORWICH COMMON WYMONDHAM	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 138 <i>Survey date: TUESDAY 20/10/15</i>		
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>		
9	NR-03-A-01 BOUGHTON GREEN ROAD NORTHAMPTON KINGSTHORPE	HOUSES	NORTHAMPTONSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 102 <i>Survey date: SATURDAY 22/09/12</i>		
	<i>Survey Type: MANUAL</i>		

LIST OF SITES relevant to selection parameters (Cont.)

10	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES		SURREY
	Edge of Town Residential Zone Total No of Dwellings:		207	
	<i>Survey date: MONDAY</i>		<i>01/04/19</i>	<i>Survey Type: MANUAL</i>
11	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE	DETACHED & SEMI-DETACHED		STAFFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		248	
	<i>Survey date: WEDNESDAY</i>		<i>22/11/17</i>	<i>Survey Type: MANUAL</i>
12	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		151	
	<i>Survey date: THURSDAY</i>		<i>11/12/14</i>	<i>Survey Type: MANUAL</i>
13	WS-03-A-08 ROUNDSTONE LANE ANGMERING	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		180	
	<i>Survey date: THURSDAY</i>		<i>19/04/18</i>	<i>Survey Type: MANUAL</i>
14	WS-03-A-09 LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON	MIXED HOUSES & FLATS		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		197	
	<i>Survey date: THURSDAY</i>		<i>05/07/18</i>	<i>Survey Type: MANUAL</i>

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
NF-03-A-07	Site permeability

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	14	180	0.087	14	180	0.286	14	180	0.373
08:00 - 09:00	14	180	0.140	14	180	0.367	14	180	0.507
09:00 - 10:00	14	180	0.148	14	180	0.183	14	180	0.331
10:00 - 11:00	14	180	0.131	14	180	0.161	14	180	0.292
11:00 - 12:00	14	180	0.129	14	180	0.154	14	180	0.283
12:00 - 13:00	14	180	0.160	14	180	0.156	14	180	0.316
13:00 - 14:00	14	180	0.170	14	180	0.151	14	180	0.321
14:00 - 15:00	14	180	0.177	14	180	0.199	14	180	0.376
15:00 - 16:00	14	180	0.270	14	180	0.171	14	180	0.441
16:00 - 17:00	14	180	0.277	14	180	0.171	14	180	0.448
17:00 - 18:00	14	180	0.343	14	180	0.160	14	180	0.503
18:00 - 19:00	14	180	0.299	14	180	0.178	14	180	0.477
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.331			2.337			4.668

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected: 102 - 288 (units:)
 Survey date range: 01/01/12 - 23/09/19
 Number of weekdays (Monday-Friday): 13
 Number of Saturdays: 1
 Number of Sundays: 0
 Surveys automatically removed from selection: 9
 Surveys manually removed from selection: 1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



BETTER SOLUTIONS, INTELLIGENTLY ENGINEERED



Appendix 5

**Land at Golden End
Kenilworth Road,
Knowle, Solihull**

**Appendix 4
LANDSCAPE AND VISUAL APPRAISAL**

Prepared on behalf of Golden End Farms Ltd.



Prepared by:
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Ref:	1622/15/RP001
Author:	DR
Checked:	BC
Date	04/01/2016

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7.0	Conclusion.....	9
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4A	Viewpoints Plan	
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LANDSCAPE AND VISUAL IMPACT ASSESSMENT

1.0 INTRODUCTION

- 1.1 In December 2015, Barry Chinn Associates Ltd. were appointed by Golden End Farms Ltd to carry out a preliminary landscape and visual appraisal of a site for a potential housing development within the Green Belt on land at Golden End Knowle, Solihull.

2.0 METHODOLOGY

- 2.1 The existing baseline conditions in and around the site have been determined by site visits and desktop studies. This information has then been utilised to make a preliminary assessment of the capacity of the site to accommodate residential development with regard to the potential change to the landscape and visual character.
- 2.2 Specific investigations to verify and record existing site conditions took place between November 2015 and January 2016.
- 2.3 This appraisal has broadly been carried out in accordance with the 'Guidelines for Landscape and Visual Impact Assessment' - Third edition, published in 2013 by the Landscape Institute and the Institute of Environmental Management and Assessment.

Assumptions & Limitations

- 2.4 Should the principle of developing the site be accepted then it is acknowledged that a full landscape and visual impact assessment will need to be carried out in support of any future planning application.

Documents Consulted

- 2.5 The following documents have been consulted in the preparation of this assessment:
- Knowle Conservation Area Appraisal carried out by Solihull Borough Council (September 2007);
 - Warwickshire Landscape Guidelines - Arden;
 - Guidelines for Landscape and Visual Assessment (Third edition 2013) published by The Landscape Institute and the Institute of Environmental Management and Assessment;
 - Natural England National Character Area Profile 97 – Arden;
 - Natural England, Magic Map website which provides listing of all designations etc..
 - Solihull's Green Infrastructure Study (January 2012)

3.0 BASELINE CONDITIONS

(refer to Landscape Constraints Plan Ref 1622/15/02 included as Appendix 2)

The review of the Local Plan and principle of development in the Green Belt and the wider National Planning Policy aspects are covered in the main report by prepared by Delta Planning.

Site Description

- 3.1 The site consists of a parcel of agricultural land directly to the east of the settlement of Knowle in Solihull. It is irregularly shaped and separated into four fields which are currently cultivated for arable crops. It is bounded by roads and dwellings on three sides and the Grand Union Canal and associated tree planting on the two remaining sides. On the southern boundary it fronts directly onto the Kenilworth Road (B4101) and in the south west corner residential properties on Golden End Drive back onto the site. Kixley Lane extends around the western and northern boundaries of the site with dwellings backing onto the site along part of the western boundary and a maintained hedgerow along the north. On the north-eastern corner the site is bounded by the bank of the canal and on the south eastern section is a recently consented residential development.
- 3.2 The wider landscape beyond the site consists broadly of rural, agricultural land with isolated farmsteads and residential properties to the north and east. Large detached residential properties on the south of Kenilworth Road face the site with rural land beyond them to the south. To the west of the site Kixley Lane is fronted by residential properties, Knowle Primary Academy and associated sports pitch. The main settlement of Knowle including the Parish Church and residential and commercial properties extends further to the north and west.

Topography (Refer to Appendix 2)

- 3.3 The site falls from Kenilworth Road in the south-west corner towards the canal bridge in the north-east corner with the overall difference in level being approximately 9 metres with a level of 125m AOD on Kenilworth Road and 116m AOD on Kixley Lane adjacent to the Grand Union Canal. Indicative contours are shown on the Site Constraints Plan included in Appendix 2.
- 3.4 Knowle itself occupies a slightly elevated location and the site is on the perimeter of this area. Beyond the site contours fall away to the north, east and south.

Existing Vegetation (Refer to Appendix 2)

- 3.5 Within the site existing hedgerows run from north to south and east to west. These are generally well maintained and include occasional mature trees which are principally oak. The portion of the site that is open to Kixley Lane also has a number of mature trees the majority of which are protected by Tree Preservation Orders. There are established native hedges where the site abuts both Kixley Lane and the Kenilworth Road and a band of tree planting on the canal embankment on the southern portion of the eastern boundary.
- 3.6 The vegetation in the wider landscape consists of agricultural land enclosed by frequent hedgerows and associated trees with occasional small copses and blocks of woodland. Front gardens along Kenilworth Road and generally within Knowle include a number of established

trees. There are also some blocks of more extensive woodland within the vicinity of the site particularly around Grimshaw Hall to the north and along the banks of the Grand Union Canal. These all contribute to and enhance the rural character of the village settlement.

Landscape Designations (Refer to Appendix 2)

3.7 The relevant Landscape Designations are taken from Magic Map online mapping, OS Data and information available on Solihull MBC website. Only those designations considered to have a direct influence on the site or to potentially be impacted upon by the development of the site are listed.

Conservation Areas

3.8 The central area of Knowle is designated a conservation area and the extent of this is shown on drawing no. 1622/15/02 included in Appendix 2. The conservation area extends directly up to the western boundary of the site and includes the area along Kenilworth Road and on the western side of Kixley Lane. The Conservation Area Appraisal prepared by Solihull MBC in 2007 makes specific mention of the landscape setting of the village and also makes note of Kixley Lane as being a “*relatively tranquil area*”.

3.9 The Conservation Area Appraisal also makes note of key views and in particular states that: “*Where the conservation area abuts open countryside, there are extensive views across the Green Belt. These points are primarily on Kenilworth Road and Kixley Lane*”.

Public Rights of Way PROW (Refer to viewpoints plan ref 1622/15/04)

3.10 The area around the site contains a number of public footpath routes and the towpath along the Grand Union Canal is part of a long distance walking route that runs from London to Birmingham. In close proximity to the site two footpaths enter Kixley Lane adjacent to its north-west corner and another PROW starts at the canal footbridge in the north-east corner of the site and connects to Elvers Green Lane to the east. A direct pedestrian route running alongside Knowle Primary School connects Kixley Lane to Knowle High Street.

Tree Preservation Orders (TPO)

3.11 A number of trees along the Kixley Lane boundary of the site are protected by Tree Preservation Orders and these are shown on drawing 1622/15/02.

Sites of Special Scientific Interest (SSSI's)

3.12 There are no SSSI's in close proximity to the site. The River Blythe which is an SSSI runs to the east and north of the site and at its closest is approximately 1km from the assessment site.

Local Nature Reserves

3.13 Knowle Wet Meadow SINC is the closest site of nature conservation interest which is opposite the site north of Kixley Lane. Within Knowle itself Jobs Close Local Nature Reserve is west of Knowle High Street just under a kilometre from the site.

Scheduled monuments

3.14 There are no Scheduled Monuments within Knowle or in close proximity to the site.

Listed Buildings

- 3.15 There are a number of nationally listed buildings within Knowle Conservation Area and a significant number of locally listed buildings. These are listed within the Conservation Area Appraisal and those in close proximity to the site are shown on drawing 1622/15/02. This includes a number of buildings on the south side of Kenilworth Road, within the Conservation Area just west of the site. The listed buildings are generally Grade II or Grade II*. The exceptions to this are two Grade I listed buildings namely: Knowle Parish Church (the church of St John The Baptist, Saint Lawrence and Saint Anne) west of the site and Grimshaw Hall to the north-west, which are both within half a kilometre of the site boundary.
- 3.16 Grimshaw Hall is enclosed by a block of woodland planting which provides effective screening around its southern boundary. However, the Conservation Area Appraisal makes particular reference to the tower of Knowle Parish Church which it regards as a '*significant landmark*' and '*focal point*' for the village.

Landscape Appraisal

In any landscape appraisal of a site reference is made to national and local landscape character assessments which identify the key characteristics of any part of the countryside within which a site is located. The National Landscape Character Areas map created by the then Countryside Agency in 1999, divided England into 159 natural areas each defined by a unique combination of landscape, biodiversity, geo-diversity and economic and cultural activity.

- 3.17 The application site is within National Character Area no. 97 – Arden. The summary description of this character area is of "*farmland and former wood-pasture lying to the south and east of Birmingham, including part of the West Midlands conurbation*". The character area description goes on to state: "*The landscape of the lower lying central area is gently rolling with small fragmented semi-natural and ancient woodlands. Mature oaks set in hedgerows, distinctive field boundaries, historic parklands and narrow river corridors are key features, all on the doorstep of a heavily urbanised area*". This provides a good description of the existing landscape to the east of Knowle village.

The Warwickshire Landscape Guidelines 1993 – Arden

- 3.18 In 1993 the Countryside Commission and Warwick District Council carried out a study, resulting in The Warwickshire Landscape Guidelines, which identified the following three regional character areas: Arden, Avon and Dunsmore. The area of Knowle and the site being assessed is situated in Arden Character Area. The Arden Character area is further sub-divided into different landscape types:
- 3.19 The area east of Dorridge and Knowle, including the area of the site, is within the zone described within the assessment as **Arden Pastures** – The overall character and qualities of this area are described as – "*A small scale enclosed landscape often pervaded by suburban influences and characterised by small fields typically bordered by mature hedgerow trees.*"

Characteristic features that are identified of particular relevance to the landscape of Golden End Farm are:

- *Gentle rolling topography*
- *Well defined pattern of small fields and paddocks*
- *Numerous mature hedgerow oaks*

- *Permanent pasture often grazed by horses*
- *A network of minor lanes often with ribbon development*

The stated management strategy for the Arden Pastures landscape is to: “*conserve and enhance the unity and small scale enclosed character of the landscape*”.

- 3.20 The area further to the east on the opposite side of the Grand Union Canal is within the character area described as **Arden Parklands** – The overall character and qualities of this area are described as – “*An enclosed gently rolling landscape defined by woodland edges, parkland and belts of trees.*”
- 3.21 In summary, the site is situated within a rural landscape on the edge of the settlement of Knowle. It contributes to the character of the village and its rural feel and landscape setting. On Kenilworth Road the development currently under construction east of the site, although isolated, extends the built form up to the Grand Union Canal which could be considered to provide a natural boundary to the village.

Visual Appraisal

Appendix 4B includes photographs taken from representative viewpoints around the site and locations are shown on drawing 1622/15/02 in Appendix 2 and on drawing 1622/15/04 which is included in Appendix 4A. A brief description is provided in Appendix 4B for each of the selected views.

- 3.22 *Viewpoints 1, 2, 3, 8 and 9* - A number of footpaths cross the landscape to the north of the site and many of these from more elevated positions provide open views looking towards Knowle across the rural landscape. Generally in these views the roofs of the existing dwellings along the Kenilworth Road or in Golden End Drive are visible along the horizon with the tower of Knowle Parish Church discernible within the tree canopy.
- 3.23 *Viewpoint 5* – This view is taken from the top of the canal bridge on the north-east corner of the site and provides a good view of the whole site and Knowle from this direction. Although the houses along Kenilworth Road break the horizon the contribution that the site makes to the rural setting and character is most evident from this location.
- 3.24 *Viewpoints 10, 11, 12, 13 and 14* - these photos are taken from the towpath on the Grand Union Canal which is part of a long distance walk between London and Birmingham. On the northern part of the eastern boundary the site is open to the canal but moving further south the canal is within cutting and planted embankments screen any potential views of the site. Views 13 and 14 are taken adjacent to Knowle Locks which are an important historical landmark and one of the few areas south of the site which have public access. Due to topography only the rear of properties on south of Kenilworth Road are visible on the horizon.
- 3.25 *Viewpoints 15, 16 and 17* – these photos show the front of the site from Kenilworth Road. The existing hedge screens lower level views from the road but houses on the south side of the road benefit from clear views across the rural landscape to the north. The Conservation Area Appraisal makes specific reference to Kenilworth Road and states that: “*properties tend to be set back further than in other streets. This produces additional space for planting which, although private, adds considerably to the visual appeal of the area.*”

- 3.26 *Viewpoint 4* – this photo is taken from Kixley Lane on the northern boundary of the site. The two dwellings on the north of Kixley Lane have open views across the site towards Kenilworth Road.
- 3.27 *Viewpoint 6* – this view represents one of the notable views from Kixley Lane referred to in the Conservation Area Appraisal and is an open view from the edge of Knowle and the Conservation Area across the rural landscape to the north-east.
- 3.28 *Viewpoints 7 and 18* – These photos are taken from the east of the site and show the TPO trees and section of the eastern boundary that fronts directly onto Kixley Lane and the conservation area.
- 3.29 In summary there is good visibility of the site from viewpoints to the north particularly from the canal towpath and bridges. A number of properties also have views across the site to the rural landscape beyond. Visually the site contributes to the rural setting of Knowle and the character of the conservation area. The northern part of the site is the most sensitive, particularly with regard to views of Knowle from rural land to the north. It is recommended that this area should be left undeveloped and retained to provide public open space, habitat mitigation and drainage features to serve any new housing development.

Landscape Proposals

In response to the landscape and visual baseline conditions a preliminary masterplan has been prepared identifying how the site might be developed for housing recognising its sensitive location on the edge of Knowle Conservation Area and its role as part of the setting for the village. Refer to Preliminary Masterplan 1622/15/03 included in Appendix 3.

Description of proposals

- 3.30 Along the site frontage to Kenilworth Road (Viewpoints 15 and 16) existing hedge and trees will be retained and the housing line will be kept back to line through with existing dwellings to the west and proposed housing being constructed to the east. This will maintain the existing building line, screen new houses and allow for a wide landscape frontage in keeping with the rest of Kenilworth Road. Proposed tree planting in association with new roads will also contribute to the green infrastructure within and across the site.
- 3.31 The northern part of the site will be kept free from development and this area will be retained as open space for recreation and habitat creation. The existing hedgerows and trees south of this area will be retained and enhanced to provide a natural boundary to the north of the proposed development. This is aligned with the current extent of existing housing on the east side of Kixley Lane and will retain the notable view (Viewpoint 6) from Kixley Lane across the countryside to the east. Keeping this area free from development will also ensure that the views of the church tower from footpaths east of the site (Viewpoints 3 and 5) will not be adversely affected. Existing hedges and TPO trees along Kixley Lane will also be retained and protected.
- 3.32 Within the site new hedge and tree planting and footpaths through the site will improve physical and visual connectivity between Kenilworth Road and Kixley Lane and the public footpaths to the north and east of the site. Existing boundary hedgerows will be retained and

re-inforced with new planting to increase bio-diversity and improve screening where necessary.

4.0 Conclusion

- 4.1 The proposed masterplan that has been developed for the site takes account of the landscape and visual considerations that have been identified and responds to its location within the green belt and on the edge of Knowle Conservation Area.
- 4.2 If this site is accepted for development there will inevitably be some impact on both the landscape and visual character. However the preliminary masterplan proposals seek to minimise this to ensure that the new housing can be successfully assimilated into the surroundings with minimal adverse residual impact. By retaining and enhancing existing boundary vegetation the development will create a new more defined and defensible boundary to the green belt.
- 4.3 It is envisaged that the landscape and visual impacts for the development will be predominantly localised and contained within a reasonably small area. However with sensitive design and careful consideration of the layout these impacts will be able to be minimised to ensure that the development will be appropriate to its location and properly respect its sensitivity.

Golden End, Knowle, Solihull

Landscape and Visual Appraisal

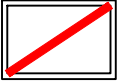
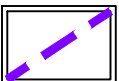
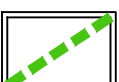


Appendix 4A

Photo Viewpoints plan - 1622/15/04

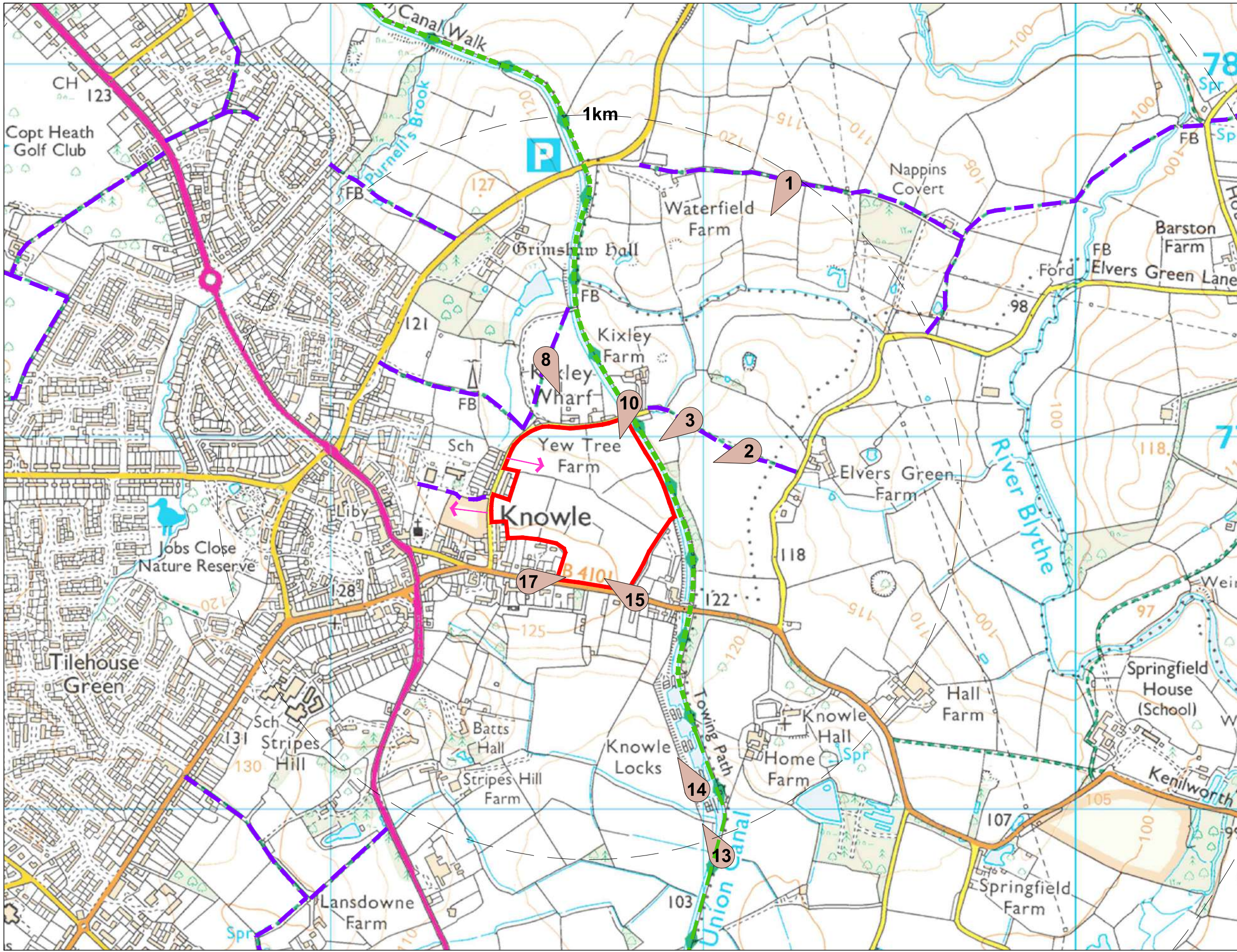
NOTES



KEY

-  Site Boundary
-  Public Right of Way
-  Grand Union Canal Walk (Long Distance Path)
-  01 Photo viewpoint locations
-  Important views from Kixley Lane identified in Knowle Conservation Area Appraisal

Refer to Constraints Plan 1622/15/02 for additional viewpoints close to site



REV NOTE DATE AUT



CLIENT
GOLDEN END FARMS

PROJECT
GOLDEN END FARM KNOWLE

DRAWING
FOOTPATHS AND PHOTO VIEWPOINTS

CONTRACT	1622/15	DRG NO.	04	
DATE	15 JAN 16	DRAWN		DR
ISSUE	COMMENT	CHECKED		DR
SCALE	1:10,000	ORIG SHEET		A3
CAD FILE	1622-15-02 constraintsplan.dwg	REV	-	

Golden End, Knowle, Solihull
Landscape and Visual Appraisal

Appendix 4B
Photo Viewpoint images



Viewpoint 1 – From footpath adjacent to Waterfield Farm to north-east of site. Kixley Farm is visible in the centre of the photo and houses and trees along Kenilworth Road are visible on the horizon.



Viewpoint 2 – From footpath between Elvers Green Lane and Kixley Farm, looking through gap in hedge. Houses on Kixley Lane (on the northern boundary of site) and northern field of site are visible but tree planting along canal screens the southern part of the site.



Viewpoint 3 – From footpath to the west of Kixley Farm. Church tower is visible on horizon in centre of photo, houses on Kixley Lane are visible on the right and houses on Golden End Drive are visible on the left.



Viewpoint 4 – From Kixley Lane (on northern boundary of site) looking towards bridge over canal. Existing hedge provides low level screening of site.



Viewpoint 5 – From bridge over canal. Northernmost field and hedge across centre of the site are visible in the foreground with houses along Kenilworth Road and Golden End Drive visible on the horizon. The tower of Knowle Parish Church is just visible to right of photo beyond houses on Kixley Lane west of the site.



Viewpoint 6 – From Kixley Lane looking across northern fields of the site. Hedge running across the site from west to east is visible on the right hand side of the picture. This represents one of the notable views from Kixley Lane that is mentioned in the Conservation Area Appraisal.



Viewpoint 7 – From Kixley Lane looking towards gap in housing east of Kixley Lane.



Viewpoint 8 – From footpath north of the site. House north of Kixley Lane is visible on the left of the photo with houses on Kenilworth Road just visible on the horizon.



Viewpoint 9 – From footbridge over the canal looking back along footpath north of the site. Houses on Kixley Lane and Golden End Drive are visible on the horizon.



Viewpoint 10 – Photo taken looking under the canal bridge on Kixley Lane at the northern corner of the site. Houses on Kenilworth Road are visible on the horizon.



Viewpoint 11 – From Canal towpath east of site. Houses on Golden End Drive are visible on right hand side of picture with houses on Kenilworth Road visible on the horizon to the left.



Viewpoint 12 – Photo taken from canal towpath just north of Kenilworth Road looking northwards. The canal embankment and associated vegetation screens the site from this point.



Viewpoint 13 – From towpath adjacent to Knowle Locks. The rear of houses on Kenilworth Road are visible in the centre of the picture.



Viewpoint 14 – Photo taken from west of Grand Union Canal looking towards rear of houses on Kenilworth Road on the horizon.



Viewpoint 15 – View from Kenilworth Road looking towards south-east corner of the site.



Viewpoint 16 – Photo taken from Kenilworth Road looking at existing gate into site with bench in highway verge. House beyond is part of new development to the east of the site.



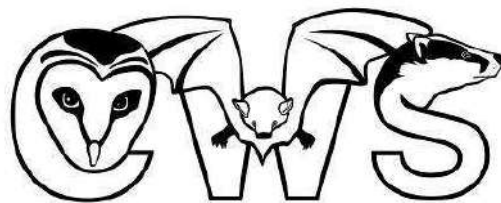
Viewpoint 17 – View from Kenilworth Road looking towards south-west corner of the site.



Viewpoint 18 – Photo taken from public footpath from town centre adjacent to playing field at rear of churchyard, east of Kixley Lane.

Appendix 6

Extended Phase 1 Habitat Survey at Golden End Farm, Kenilworth Road, Knowle



Cotswold Wildlife Surveys

28th April 2016

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SUMMARY

In April 2016, at Golden End Farm on Kenilworth Road near Knowle, Cotswold Wildlife Surveys was instructed to carry out an Extended Phase 1 Habitat Survey of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by proposed development.

A search of the ecological data revealed a small number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.5 km radius of the site.

Bats included pipistrelles *Pipistrellus sp.*, observed 1.0 km to the east at Springfield House School in 1984, and 1.2 km to the east in 1994. 100 m south of the school there was a record of a Whiskered Bat *Myotis mystacinus* in 1983, with Daubenton's Bat *M. daubentonii* 1.2 km to the east.

There were several records of Badger *Meles meles* in the area, [REDACTED] but no Otter *Lutra lutra* or Water Vole *Arvicola amphibius*, and no records of reptiles. There was a single observation of a Common Frog *Rana temporaria* 1.4 km to the southeast, but no other common amphibians, and no Great Crested Newts *Triturus cristatus*.

A few veteran trees were noted in the data, none within 1.0 km, and there were several records of White-letter Hairstreak butterfly *Satyrion w-album*, including one in the southeastern corner of the survey site. This was from 1994, and since then the species has undergone a significant decline as Elm trees *Ulmus spp.* have disappeared from the landscape.

The site itself was not designated or identified as a site of wildlife importance or interest, but within the search area there were two statutory sites; River Blythe Site of Special Scientific Interest (SSSI) and Jobs Close Local Nature Reserve (LNR). There were a number of Ecosites, including the Grand Union Canal which ran along the eastern boundary of the site and Ecosite 101/17 approximately 20 metres to the northwest over Kixley Lane.

There was no direct connectivity between the statutory sites and Golden End Farm, and they were separated by intervening land use such as arable farmland, residential areas and main and local roads. There was direct connectivity with the Grand Union Canal Ecosite which bordered the east of the site, although there were no records of Otter or Water Vole within it.

The Phase 1 survey took place on 28th April 2016, in mild, bright conditions with a light wind.

The site comprised four arable fields, one of which was large whilst the others were more moderate in size. The fields were separated and enclosed by a combination of tall and untrimmed and low clipped hedgerows.

The southern boundary hedge and the hedgerow along the west of the largest field were both species rich, whilst the rest were all species poor. The majority also had ditches at the base, which at the time of the survey were holding water in places.

In the centre of the largest field there was a small damp area with scattered trees, whilst the latter were also present in the hedgerows, with most of these large mature Pedunculate Oaks *Quercus robur*.

There were some narrow field margins of tall ruderal vegetation, although there were also some wildflowers present at the hedgerow bases.

No rare vascular plants were found, and all species recorded were common and widespread.

A total of 11 species of birds were observed. Of these two were Species of High Conservation Concern (RSPB Red list); Song Thrush *Turdus philomelos* and Yellowhammer *Emberiza citrinella*, two were Species of Medium Conservation Concern (RSPB Amber List); Dunnock *Prunella modularis* and Stock Dove *Columba oenas*, and the rest were species of Low Conservation Concern (RSPB Green List).

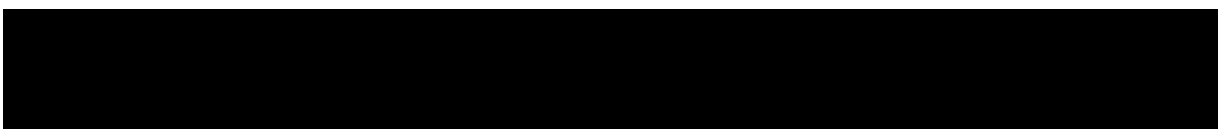
Several of these birds were likely to be nesting in the hedges during the breeding season and indeed a pair of Robins *Erithacus rubecula* were noted, and the Stock Dove was seen flying out of a cavity in a Pedunculate Oak tree where it was either roosting or nesting.

Since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal should be undertaken outside the period 1st March to 31st August inclusive.

If this time frame cannot be avoided, a close inspection of the trees and shrubs to be removed should be undertaken prior to clearance. Work should not be carried out within 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

Several of the trees within the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered suitable for bat roosting and/or hibernation. These were generally within the mature Pedunculate Oak trees around the field boundaries. As such, if these trees are to be affected by the proposed works then further surveys for bats will be required.

The site overall was considered to have low potential for foraging bats, as most of the hedgerows were quite low, and although there was some cover there was little suitable vegetation to attract invertebrates. However, the canal which runs along the eastern boundary of the site is likely to be used by foraging bats which may also venture onto the site.



This was not thought to be the main sett, but instead was considered to be an outlier or subsidiary sett. There were also two holes in the southwestern corner of the site where there were signs of Badger activity. One of these holes looked to have been used by Badger, but it was considered more likely that they had since been taken over by Rabbits *Oryctolagus cuniculus*.

There were a total of seven ponds within a 500 metre radius of the site, although all of these were over 250 metres from the site boundaries, with the majority over 400 metres away. They were all separated from the survey area by significant barriers to newt dispersal which included the Grand Union Canal, main and local roads, arable fields under continuous cultivation, and residential areas. As such it was considered that any amphibians, if present, within these ponds would not be found on the application site.

The site itself was unsuitable for reptiles and amphibians, since although there were some wet ditches, these were isolated. There were very limited foraging opportunities and no suitable refugia or hibernacula. Furthermore the majority of the site was arable farmland under continuous cultivation. As such, the site was considered unsuitable for Great Crested Newts and reptiles.

Although no surveys for reptiles and amphibians were considered necessary, care should be taken at all times when removing vegetation and stripping topsoil. Any amphibians, reptiles (or small mammals) disturbed or uncovered should be left to vacate the work site in their own time.

It was also possible to assess the potential importance of the habitats within the application site to invertebrates. Since the majority of the site was arable farmland under continuous cultivation, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. Indeed, Small Tortoiseshell *Aglais urticae* was the only butterfly noted.

If excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. Escape routes should therefore be provided if trenches cannot be infilled immediately. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

1. INTRODUCTION

1.1 Background and survey objectives

In April 2016, at Golden End Farm on Kenilworth Road near Knowle, Cotswold Wildlife Surveys was instructed to carry out an Extended Phase 1 Habitat Survey of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by the proposed development.

A search of the ecological data revealed a small number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.5 km radius of the site.

1.2 Site description

The site comprised four arable fields, one of which was large whilst the others were more moderate in size. At the time of the survey they were planted with cereal crops.

There were some narrow field margins of tall ruderal vegetation dominated by Common Nettle *Urtica dioica*, Cow Parsley *Anthriscus sylvestris* and Hogweed *Heracleum sphondylium*, with Common Cleavers *Galium aparine*, White Dead-nettle *Lamium album*, Green Alkanet *Pentaglottis sempervirens*, Field Forget-me-not *Myosotis arvensis* and Dandelion *Taraxacum Section vulgaria* also present. The sward consisted largely of Perennial Ryegrass *Lolium perenne*, but also included meadow-grasses *Poa spp* and Cocksfoot *Dactylis glomerata*.

The fields were separated and enclosed by a combination of tall and untrimmed and low clipped hedgerows. The southern boundary hedge and the hedgerow along the west of the largest field were both species rich, whilst the rest were all species poor. The majority also had ditches at the base, which at the time of the survey were holding water in places, and at the east were flowing into the canal. The hedgerows were dominated by Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Elder *Sambucus nigra* and Hazel *Corylus avellana*, with Holly *Ilex aquifolium*, Yew *Taxus baccata* and Dog Rose *Rosa canina* also present in the species rich sections.

Along the hedgerow which bordered the northern boundary of the site along Kixley Lane there were a number of Bluebells *Hyacinthoides non-scripta*, along with common wildflower species such as Selfheal *Prunella vulgaris*.

In the centre of the largest field there was a small damp area with scattered trees, whilst the latter were also present throughout the hedgerows, with most of the trees comprising large mature Pedunculate Oaks, with some Sycamore *Acer pseudoplatanus*, Crack Willows *Salix fragilis* and Horse Chestnuts *Aesculus hippocastanum*.

There was a small area of dense Bramble *Rubus fruticosus* scrub in the eastern corner of the site.

The Ordnance Survey Grid Reference is SP 18696 76844 located on the approximate centre of the site.

1.3 Proposed works

The proposal is for a residential development which will include a large recreation area and a separate wildlife area.

2. METHODOLOGY

2.1 Desk study

A detailed desk study was undertaken to determine the nature conservation designations and protected species that had been recorded within a 1.5 km radius of the site. This involved contacting statutory and non-statutory organisations, and then assimilating and reviewing the data provided.

The consultees for the desk study were:

- ❑ Multi Agency Geographic Information (MAGIC) website www.magic.gov.uk;
- ❑ National Biodiversity Network Gateway website;
- ❑ Warwickshire Biological Records Centre.

2.2 Habitat survey

An Extended Phase 1 Habitat Survey was carried out across the whole of the survey site. It was conducted using standard JNCC (2003) techniques and methodologies.

The site was visited on the 28th April 2016 in mild, bright conditions.

2.3 Protected species survey

During the surveys the potential for other protected and important species was assessed. This included European Protected Species, legally protected species and Local Biodiversity Action Plan Species (and habitats).

2.4 Constraints

There were no constraints, and the survey was carried out during the optimum period.

3. RESULTS

3.1 Desk study

3.1.1 Designated sites

The site itself was not designated or identified as a site of wildlife importance or interest, but within the 1.5 km search area there were two statutory sites; River Blythe Site of Special Scientific Interest (SSSI) and Jobs Close Local Nature Reserve (LNR).

There were a number of Ecosites within the search area including the Grand Union Canal which ran along the eastern boundary of the site and Ecosite 101/17 approximately 20 metres to the northwest over Kixley Lane.

There was no direct connectivity between the statutory sites and Golden End Farm, and they were separated by intervening land use such as arable farmland, residential areas and main and local roads.

There was direct connectivity with the Grand Union Canal Ecosite which bordered the east of the site, although there were no records of Otter or Water Vole within it.

3.1.2 Protected species

The ecological data search revealed a small number of records of European Protected Species, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species within a 1.5 km radius of the site.

These included pipistrelle bats, observed 1.0 km to the east at Springfield House School in 1984, and 1.2 km to the east in 1994. 100 m south of the school there was a record of a Whiskered Bat in 1983, with Daubenton's Bat 1.2 km to the east.

There were several records of Badger in the area, [REDACTED] but no Otter or Water Vole, and no records of reptiles either. There was a single observation of a Common Frog 1.4 km to the southeast, but no other common amphibians, and no Great Crested Newts.

A few veteran trees were noted in the data, none within 1.0 km, and there were several records of White-letter Hairstreak butterfly, including one in the southeastern corner of the survey site. This was from 1994, and since then the species has undergone a significant decline as Elm trees have disappeared from the landscape.

3.2 Habitat survey

3.2.1 Habitat descriptions

The following habitats were recorded across the site:

- Scattered broadleaved trees;
- Arable;
- Tall ruderal vegetation;
- Dense scrub;
- Standing water;
- Running water;
- Wet ditch;
- Dry ditch;
- Intact hedge;
- Fence.

These are shown on the Phase 1 Habitat Survey map in Appendix 1, with the target notes (where applicable) in Appendix 2.

Scattered broadleaved trees

In the centre of the largest field there was a small damp area with scattered trees, whilst the latter were also present throughout the hedgerows.

Most of the trees were large mature Pedunculate Oaks, with Sycamore, Crack Willow and Horse Chestnut also noted (Figs. 1, 2, 3 and 4).



Figs. 1 & 2 Scattered trees



Figs. 3 & 4 Scattered trees

Arable

The site comprised four arable fields under continuous cultivation, one of which was large whilst the others were more moderate in size. At the time of the survey they were planted with cereal crops (Figs. 5 and 6).



Figs. 5 & 6 Arable farmland

Tall ruderal vegetation

There were some narrow field margins of tall ruderal vegetation dominated by Common Nettle, Hogweed and Cow Parsley, with Common Cleavers, White Dead-nettle, Green Alkanet, Field Forget-me-not and Dandelion also present.

The sward included Perennial Ryegrass, meadow-grasses and Cocksfoot (Figs. 7 and 8).



Figs. 7 & 8 Tall ruderal vegetation

Dense scrub

There was a small area of dense Bramble scrub in the eastern corner of the site (Fig. 9).



Fig. 9 Dense scrub

Standing water

In the centre of the largest field there was a damp hollow which had become very overgrown with grasses and tall ruderals (Fig. 10).



Fig. 10 Standing water

Running water

At the eastern boundary there was a small section of wet ditch which was flowing into the canal (Fig. 11).



Fig. 11 Running water

Wet ditch

Along the base of the hedgerows were drainage ditches, some of which contained water at the time of the survey (Figs. 12 and 13).



Figs. 12 & 13 Wet ditches

Dry ditch

Many of the ditches did not contain any water and were dry (Figs. 14 and 15).



Figs. 14 & 15 Dry ditch

Intact hedge

The fields were separated and enclosed by a combination of tall and untrimmed and low clipped hedgerows.

The southern boundary hedge and the hedgerow along the west of the largest field were both species rich, whilst the rest were all species poor (Figs. 16, 17, 18 and 19).



Figs. 16 & 17 Species rich hedgerows

The hedgerows were dominated by Hawthorn, Blackthorn, Elder and Hazel, with Holly, Yew and Dog Rose also present in the species rich sections.

There were also conifer hedges along the boundaries with neighbouring residential properties.

Along the hedgerow which bordered the northern boundary of the site along Kixley Lane there were a number of Bluebells, along with common wildflower species such as Selfheal (Ref. Fig. 19).



Figs. 18 & 19 Species poor hedgerows with Bluebells (r)

Fence

Some of the boundaries were bordered with wire fencing.

3.2.2 Flora

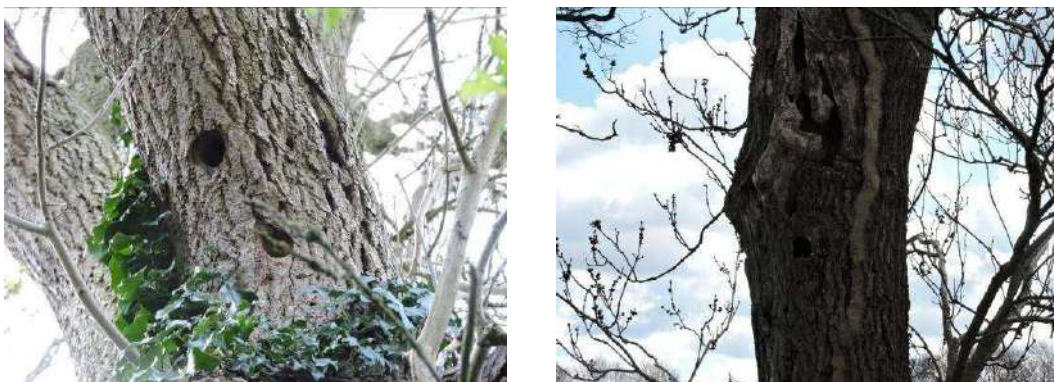
The botanical composition of each habitat was typical, and all species recorded were common and widespread. No rare vascular plants were found, and there were no invasive species or notifiable weeds.

A list of species observed is presented in Appendix 3.

3.3 Protected species survey

3.3.1 Bats

Several of the trees within the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered potentially suitable for bat roosting and/or hibernation (Figs. 20, 21, 22 and 23 – Target Notes 1 and 2). These were generally within the mature Pedunculate Oak trees around the field boundaries.

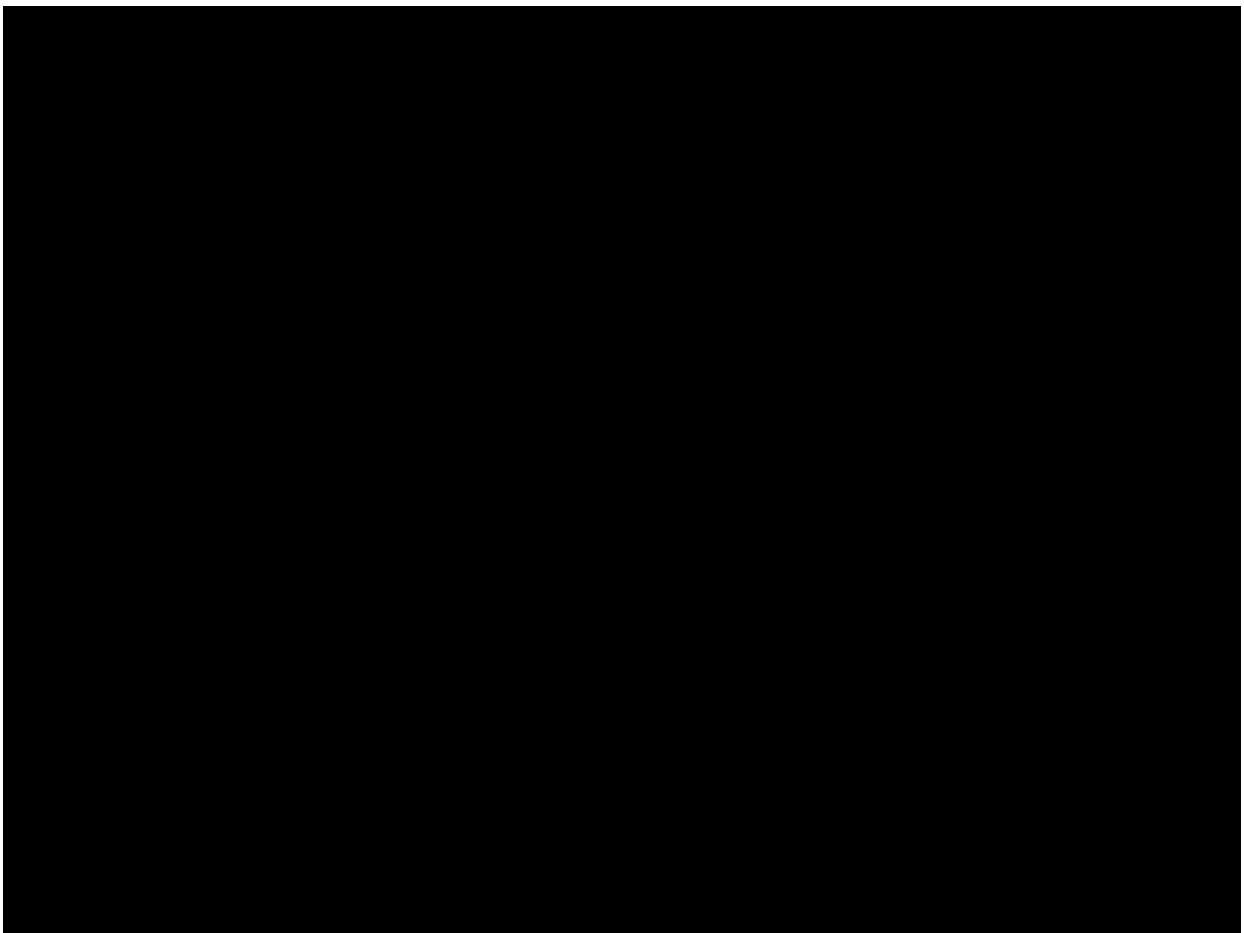


Figs. 20 & 21 Woodpecker holes and cavities



Figs. 22 & 23 Holes and cavities

The site was considered to have low potential for foraging bats, as most of the hedgerows were quite low, and although there was some cover there was little suitable vegetation to attract invertebrates. However, the canal which runs along the eastern boundary of the site is likely to be used by foraging bats which may also venture onto the site.



3.3.3 Otters

No evidence of Otter presence was found and there were no records of the species within the nearby stretch of canal.

3.3.4 Water Voles

No evidence of Water Vole presence was found and there were no records of the species within the nearby stretch of canal.

3.3.5 Birds

A total of 11 species of birds were observed. Of these two were Species of High Conservation Concern (RSPB Red list); Song Thrush and Yellowhammer, two were Species of Medium Conservation Concern (RSPB Amber List); Dunnock and Stock Dove, and the rest were species of Low Conservation Concern (RSPB Green List).

Several of these birds were likely to be nesting in the hedges during the breeding season, and indeed a pair of Robins were noted, whilst the Stock Dove was seen flying out of a cavity in a Pedunculate Oak tree where it was either roosting or nesting (Target Note 2).

A full list of species noted is given in Appendix 4.

3.3.6 Reptiles

No reptiles were observed during the survey and the site was considered to be unsuitable given its isolation by main and local roads, the canal, residential areas and arable farmland under continuous cultivation.

3.3.7 Great Crested Newts

There were a total of seven ponds within a 500 metre radius of the site, although all of these were over 250 metres from the site boundaries, with the majority over 400 metres away.

They were all separated from the survey area by significant barriers to newt dispersal which included the Grand Union Canal, main and local roads, arable fields under continuous cultivation and residential areas. As such it was considered that any amphibians, if present, within these ponds would not be found on the application site.

The site itself was unsuitable for Great Crested Newts, since although there were some wet ditches present, these were isolated within the site, whilst there were very limited foraging opportunities and no suitable refugia or hibernacula.

Furthermore the majority of the site was arable farmland under continuous cultivation.

3.3.8 Invertebrates

No important or uncommon invertebrates were observed although several Small Tortoiseshell Butterflies were noted (Fig. 26).



Fig. 26 Small Tortoiseshell

3.3.9 Other species

No other protected or LBAP species were observed during the site visit.

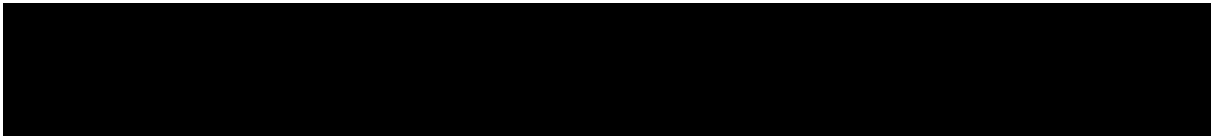
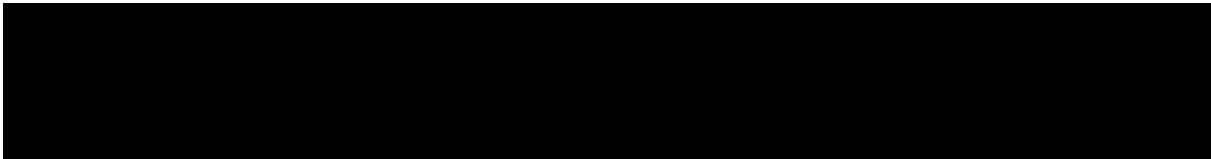
4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Site evaluation

The site was dominated by arable farmland under continuous cultivation which was of low interest to wildlife. However, the species rich and species poor hedgerows were of potential to nesting birds. Indeed, a Stock Dove was seen flying out of a cavity in a Pedunculate Oak tree where it was either roosting or nesting.

Several of the trees within the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered suitable for bat roosting and/or hibernation. These were generally within the mature Pedunculate Oak trees around the field boundaries.

The site was considered to have low potential for foraging bats, as most of the hedgerows were quite low, and although there was some cover there was little suitable vegetation to attract invertebrates. However, the canal which runs along the eastern boundary of the site is likely to be used by foraging bats which may also venture onto the site.



There were a total of seven ponds within a 500 metre radius of the site, although all of these were over 250 metres from the site boundaries, with the majority over 400 metres away. They were all separated from the survey area by significant barriers to newt dispersal, which included the Grand Union Canal, main and local roads, arable fields under continuous cultivation and residential areas. As such it was considered that any amphibians, if present, within these ponds would not be found on the application site.

The site itself was unsuitable for reptiles and amphibians, since although there were some wet ditches present, as mentioned above these were isolated within the site, whilst there were very limited foraging opportunities and no suitable refugia or hibernacula. Furthermore the majority of the site was arable farmland under continuous cultivation. As such, the site was considered unsuitable for Great Crested Newts and reptiles.

It was also possible to assess the potential importance of the habitats within the application site to invertebrates. Since the majority of the site was arable farmland under continuous cultivation, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. Indeed, Small Tortoiseshell was the only butterfly noted.

4.2 Possible impacts of proposed work and recommendations

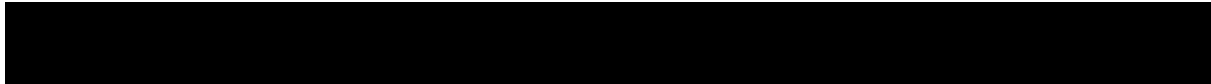
The main impact of any re-development will be on the semi-natural habitats noted above, in particular the hedgerows and trees.

These provided cover for nesting birds. Since all in-use bird's nests and their contents are protected from damage or destruction, any tree or shrub removal should be undertaken outside the period March to August inclusive. If this time frame cannot be avoided, a close inspection of the trees or shrubs to be removed should be undertaken prior to clearance. Work should not be carried out within 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

Some of the trees were also considered to be potentially suitable for roosting bats, therefore further surveys should be carried out on these trees if they are to be affected by proposed development.

Although no additional surveys for reptiles and amphibians were considered necessary, care should be taken at all times when removing vegetation and stripping topsoil. Any amphibians, reptiles (or small mammals) disturbed or uncovered should be left to vacate the work site in their own time.

There will be a potential impact of a development on the nearby Grand Union Canal, so an appropriate buffer of wildlife habitat should be retained along the eastern boundary to reduce or remove this impact.



Finally, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. Escape routes should therefore be provided if trenches cannot be infilled immediately. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

4.3 Further surveys

If any tree or shrub removal cannot be timed appropriately to avoid the bird nesting period (considered to be March to August inclusive), then further surveys of the trees and/or shrubs to be removed will be necessary.

A survey for bats will be required if any of the potentially suitable trees are to be removed or significantly affected.

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APPENDICES

Appendix 1: Phase 1 Habitat Survey Map

Appendix 2: Target Notes

Appendix 3: Plant species list

Appendix 4: Bird species list

Appendix 5: Relevant legislation

Appendix 3: Plant species list

Latin name	Common name
<i>Cupressus sp</i>	Conifer species
<i>Ilex aquifolium</i>	Holly
<i>Taxus baccata</i>	Yew
<i>Quercus robur</i>	Pedunculate Oak
<i>Acer pseudoplatanus</i>	Sycamore
<i>Salix fragilis</i>	Crack Willow
<i>Aesculus hippocastanum</i>	Horse Chestnut
<i>Prunus spinosa</i>	Blackthorn
<i>Crataegus monogyna</i>	Hawthorn
<i>Sambucus nigra</i>	Elder
<i>Corylus avellana</i>	Hazel
<i>Rosa canina</i>	Dog Rose
<i>Rubus fruticosus</i>	Bramble
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Prunella vulgaris</i>	Selfheal
<i>Taraxacum Section vulgaria</i>	Dandelion
<i>Myosotis arvensis</i>	Field Forget-me-not
<i>Pentaglottis sempervirens</i>	Green Alkanet
<i>Lamium album</i>	White Dead-nettle
<i>Galium aparine</i>	Common Cleavers
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Heracleum sphondylium</i>	Common Hogweed
<i>Urtica dioica</i>	Common Nettle
<i>Lolium perenne</i>	Perennial Ryegrass
<i>Dactylis glomerata</i>	Cocksfoot
<i>Poa spp.</i>	Meadow-grass species

Appendix 4: Bird species list

Common name	Latin name
Woodpigeon	<i>Columba palumbus</i>
Stock Dove	<i>Columba oenas</i>
Dunnock	<i>Prunella modularis</i>
Wren	<i>Troglodytes troglodytes</i>
Robin	<i>Erithacus rubecula</i>
Song Thrush	<i>Turdus philomelos</i>
Blackbird	<i>Turdus merula</i>
Great Tit	<i>Parus major</i>
Blue Tit	<i>Cyanistes caeruleus</i>
Yellowhammer	<i>Emberiza citrinella</i>
Magpie	<i>Pica pica</i>

Appendix 5: Relevant legislation

5.1 – Birds

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981. There are penalties for:

- ❑ *Killing, injuring or capturing them, or attempting any of these;*
- ❑ *Taking or damaging the nest whilst in use;*
- ❑ *Taking or destroying the eggs.*

5.2 – Bats

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines ‘European protected species of animals’.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- ❑ *Intentionally or deliberately kill, injure or capture (or take) bats;*
- ❑ *Deliberately disturb bats (whether in a roost or not);*
- ❑ *Recklessly disturb roosting bats or obstruct access to their roosts;*
- ❑ *Damage or destroy roosts;*
- ❑ *Possess or transport a bat or any part of a part of a bat, unless acquired legally;*
- ❑ *Sell (or offer for sale) or exchange bats, or parts of bats.*

The word ‘roost’ is not used in the legislation, but is used here for simplicity. The actual wording is ‘any structure or place which any wild animal...uses for shelter or protection’ (WCA), or ‘breeding site or resting place’ (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

5.3 – Badgers

Badgers are protected in Britain by the Protection of Badgers Act 1992. The purpose of this Act is to protect the animals from deliberate cruelty and from the incidental effects of lawful activities which could cause them harm. Under this legislation it is an offence to:

- ❑ *Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;*
- ❑ *Interfere with a sett by damaging or destroying it;*
- ❑ *Obstruct access to, or any entrance of, a Badger sett;*

- Disturb a Badger when it is occupying a sett.

Note that if any of the above resulted from a person being *reckless*, even if they had no intention of committing the offence, their action would still be considered an offence. A person is not guilty of an offence if it can be shown that the act was '*the incidental result of a lawful operation and could not have been reasonably avoided*'; only a court can decide what is 'reasonable' in any set of circumstances.

Penalties for offences under this legislation can be up to six months in prison and a fine of up to £5,000 for each offence.

A Badger sett is defined in the Act as '*any structure or place which displays signs indicating current use by a Badger*'. This can include culverts, pipes and holes under sheds, piles of boulders, old mines and quarries, etc.

'Current use' does not simply mean 'current occupation' and for licensing purposes it is defined as '*any sett within an occupied Badger territory regardless of when it may have last been used*'. A sett therefore, in an occupied territory, is classified as in current use even if it is only used seasonally or occasionally by Badgers, and is afforded the same protection in law.

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Golden End Farm, Kenilworth Road, Knowle – Extended Phase 1 Habitat Survey

To: Golden End Farms

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