

21st July 2021

Planning Policy Stroud District Council Ebley Mill Stroud GL5 4UB 3rd Floor Regent House 65 Rodney Road Cheltenham GL50 1HX

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Dear Sir/Madam

REGULATION 19 CONSULTATION – LAND SOUTH OF GRANGE ROAD, WHADDON FOR NEWLAND HOMES

Newland Homes Limited (Newland) submitted duly made representations to the previous Regulation 18 Consultation on the Stroud Local Plan Review (see **Appendix 1**). Those representations were in relation to land south of Grange Road, Whaddon and proposed Policy G2: Whaddon.

As per previous representations, the site is located adjoining the City Council boundary and in very close proximity to the site approved by the City Council for 250 dwellings, being developed by Persimmon which lies to the west. This representation supports the proposed allocation and provides additional evidence to demonstrate that the site is still deliverable, unconstrained and available for development.

The Regulation 19 Plan proposes the allocation of Land at Whaddon (draft Policy G2). This is essentially as a 'safeguarded' allocation subject to the confirmation in the JCS Review of the need for the site to meet the housing needs of Gloucester. Ridge and Partners LLP are of the view that the site is not only deliverable, but also imperative to Gloucester sustaining a 5-year housing land supply throughout the plan period. Reasons to support this view are set out within this representation.

Draft Policy G2: Land at Whaddon

As detailed within the Joint Core Strategy (JCS) additional sites are required to meet Gloucester's housing needs beyond 2028.

Land at Whaddon was an Area of Search in the South West Regional Spatial Strategy and supported by the Secretary of State following the independent Examination. The RSS was never however published and was indeed revoked following the change in Government. During the examination of the subsequent JCS, the Inspector considered Land at Whaddon as an omission site, and in her Interim Findings (dated 26 May 2016) concluded that the site would "make an appropriate allocation to help meet the housing requirements of Gloucester and the JCS area" (paragraph 73). Thus, it is proposed that Stroud District will make a contribution to meeting the unmet housing needs of



Gloucester City for the Plan period by providing for growth at Whaddon and provisionally allocating 3,000 dwelling for delivery up to 2040.

The JCS Review is due to publish its Preferred Options in Summer 2021, and we understand that this is the point at which Stroud would remove the 'safeguarded' element and seek to formally allocate Land at Whaddon in their emerging Local Plan – assuming that this confirms the anticipated level of unmet need and identified Land at Whaddon as one of the preferred sites to meet this.

Our understanding is that the scale of unmet housing need within Gloucester is likely to necessitate more than one new urban extension into neighbouring authorities, and therefore posit that Land at Whaddon remains in the most sustainable location for meeting Gloucester's unmet need. That said, Ridge and Partners LLP support the assessments that have been carried out of Strategic Opportunities in Parts of Gloucester: Interim Report that assessed 29 locations adjacent to Gloucester and identified land at Whaddon as the site with the most potential to help meet the future housing needs of Gloucester and maintain that the site is still available and deliverable within the plan period.

The draft allocation within the Regulation 19 plan has been based upon a robust evidence base to date and is unequivocally the most sustainable option for meeting Gloucester's needs.

Gloucester City Plan

The GCP has been prepared in the context of the adopted JCS, which was intended to be subject to an immediate review which has yet to progress to any meaningful extent and was recognised not to meet the needs of the City. This was against a housing requirement of at least 14,359 but a plan provision of only 13,287 (1,072 dwelling shortfall which was the subject of JCS Policy REV1 – the immediate review).

Moreover, the most recent Gloucester City 5YHLS statement (produced in June 2021) only reinforces our view that the needs for Gloucester have consistently failed to be met. The latest statement reports a 1,975 dwelling from 2011/12 – 2020/21. It is considered that the 5YHLS, although reported at 5.04 at present, would be at risk in the future without the full allocation of Whaddon, particularly as there are no reasonable alternative sites.

Due to clear uncertainty, the GCP seeks to deliver further housing allocations, but the sum of those allocations, commitments and completions will result in the delivery of 13,084 dwellings to the end of the plan period (see Housing Background Paper Table as part of the GCC examination library). This is a result in delays in delivery at the Strategic Allocations in Tewkesbury Borough and a reduction in the anticipated number of sites to be allocated in the GCP (down from 1518 in the JCS to 972 in the GCP Submission Draft).



The details above demonstrate that there is an overall shortfall of 3,047. This only supports the case that Whaddon will be needed to meet the City's need and should be consolidated as a full allocation within the Stroud District Plan.

The GCP should, at least, plan to meet the needs set out in the JCS. The context of housing delivery in Gloucester City is one which does not meet the needs of its population. There has been an overall reliance on neighbouring authorities to support Gloucester in meeting it needs and has demonstrably worked well. The clear difficulties in maintaining housing delivery within the City is therefore a primary concern that can clearly be addressed by Whaddon. It is also considered that there are no reasonably alternative sites that can be used to meet the needs for Gloucester. It is our view that the site's allocation should be consolidated and recognised as the best opportunity for Gloucester to meet their needs.

As detailed previously, it is a concern that the delays to the JCS will only hinder Gloucester's ability to sustain a 5-year supply. The allocation of the site can provide both Stroud District and Gloucester City a degree of flexibility in housing delivery to help maintain a 5-year housing land supply position for authorities. At this juncture, there is clear delays, and the respective JCS development plans are unlikely to align which will likely inflict further delays and therefore implicate supply.

To further demonstrate that the site at Whaddon is deliverable, a consortium is continuing work on a design brief. This is set out in more detail below.

Master planning

With sight of submitting an application, Newland have worked with the Taylor Wimpey and L&Q to produce a joint masterplan to support the allocation which can be seen at **Appendix 2**. The masterplan for the site provides a well-considered approach which address the site boundaries ensuring a landscape edge to the land parcel, along with both highway and footpath links to adjacent development opportunities.

The proposed landscape principles are interconnected to the wider area. The landscaping principles sets out the key parks and recreational destinations, amenity and natural open spaces, key edible landscape areas, key ecological habitats areas, natural open space with water management function, M5 noise mitigation zone, key landscape buffer zones and vista corridors towards Church of St Margaret. It is clear from the masterplan that the floodplain running through the centre of the site has been incorporated into the design and utilised to incorporate key parks and recreational destinations along a natural open space with water management function.

As well as the existing and proposed key connection principles the masterplan sets out the proposed development principles by illustrating where the new residential neighbourhoods, local centres, community hub, learning/sport hub, modal transport interchange and rail halt site could be located. Newland are maintaining discussions with Taylor



Wimpey and L&Q on the masterplanning of the site. Works are continuing to produce a design brief for the whole site and will be submitted to the council once finalised.

Land at south of Grange Road

Highways

Supporting this representation is a technical note produced by Carl Tonks Consulting (see Appendix 4). You will note that this concluded that the development of the site can be accommodated with limited and proportional improvements to the highway network. In addition, Newland have also appointed All Ecology (see Appendix 5) and MHP whose advice on landscape and visual considerations has informed the attached Concept Sketch Layout for approximately 50 plots (see Appendix 6). This technical note was presented to Gloucestershire County Council Highways to accompany pre-application decisions. Within their response they set out that the general layout, design and access was considered acceptable.

Due to the degree of self-containment and not being reliant on the wider allocation coming forward, the County Council were able to appropriately assess the full details of highway design, sustainable infrastructure provisions, travel plans and off-site infrastructure. It was considered that:

• "The general principal of this development coming forward ahead of the wider allocation is not objected to; however, a detailed application will need to take into account its role in the wider allocation and provide relevant contributions and provisions to ensure that it addresses its proportionate role in the wider housing allocation provision set out in Stroud's local Plan. In addition, this development, should it proceed to full application, must address how it will operate and ensure sustainable trips are provided for ahead of any wider schemes associated with the wider allocation. It must be able to operate and provide safe access to services and amenities from occupation and not rely on infrastructure to be provided later; this includes, but not limited to, safe crossing of Grange Road, access to schools and public transport, and be serviced."

Ecology

In April 2020, All Ecology Ltd was commissioned to undertake a Walkover Survey the site known as Land off Grange Road. The effect of the development has been considered and key constraints identified. It was concluded that habitats present on site are of low to moderate ecological value.

The proposed development would result in the removal of a section of the northwest boundary hedge to enable access into the site from Grange Road. Thus, it has been recommended that a Hedgerow Assessment is commissioned to accompany any forthcoming application to determine if the hedge is classified as 'important' under the Hedgerow Regulations 1997. It is considered unlikely to qualify in terms of its ecological value, but it may have historical significance.



Suggestions for maximising ecological gains through habitat creation are given.

The habitats on site have the potential to support a range of protected or notable species. The following species/groups are either present or potentially present and the recommended actions are as follows:

- Bats The boundary hedge and trees provided suitable foraging habitat. A section of this boundary hedgerow will be removed to allow a new access road to be created. The hedge is low and is poorly connected to the wider area. The hedge is unlikely to be important for commuting bats, and therefore a bat activity survey is not required. New tree and shrub planting on the site will compensate for the small loss of foraging habitat. Suggestions for mitigation and enhancement are given.
- Birds Nesting and foraging habitats across the site. No further surveys at this time but any vegetation clearance should be undertaken outside the bird nesting season unless a pre-works survey confirms absence. Suggestions for mitigation and enhancement given. Suggestions for maximising ecological gains through habitat creation are given

Recommendation

Land at Whaddon is for the most part within Stroud, however, there is an area of approximately 5.4ha which falls within Gloucester. The area that falls within the Gloucester administrative boundary is only accessibly via land within Stroud and therefore can only come forward as part of a comprehensive scheme.

Further, as a 'safeguarded' allocation the site is dependent on the review of the JCS and Gloucester's Plan. However, there is evidence that Gloucester has struggled to meet its JCS target and should the plan be found sound, there is likely to be unnecessary delays inflicted by the planning process to address the shortfall. To avoid this Whaddon is the best option. It addresses the shortfall, provides flexibility and assures an Inspector that that the needs of Gloucester can be catered for throughout the plan period.

Thus, we suggest that the council modifies the policy to enable delivery, avoid delays and provide clarity for developers and decision makers. To provide this clarity we suggest additional text is drafted that ensures that a planning application may come forward prior to conclusion of either the JCS or Gloucester City's Plan.

Sequentially, there are no other credible sites that can be delivered to meet Gloucester's needs. Growth at South Gloucester and specifically at Whaddon is entirely unconstrained by any protective environmental designations. This is demonstrated throughout the promotion of the site which has continued demonstrate the site is suitable and the best, most sustainable option for growth, and importantly, deliverable within the plan period.

Yours sincerely,





Planner

For Ridge and Partners LLP

Enclosures:

Appendix 1: Regulation 18 Representation

Appendix 2: Masterplan

Appendix 3: Technical Highway Note Appendix 4: Ecological Walkover Survey Appendix 5: Concept Sketch Layout

APPENDIX 1

Regulation 18 Representation



RIDGE

REGULATION 18
REPRESENTATION- STROUD
LOCAL PLAN REVIEW

REPRESENTATIONS ON BEHALF OF NEWLAND HOMES LIMITED

20/12/2019

REGULATION 18 REPRESENTATION STROUD LOCAL PLAN REVIEW

20/12/2019

Prepared for

Newland Homes Limited

Prepared by

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APPENDIX 1 SITE LOCATION PLAN

1. INTRODUCTION

- 1.1. Newland Homes Limited (Newland) controls land south of Grange Road, within Stroud District and adjoining Gloucester City Council boundary and in very close proximity to the recently approved site for 250 dwellings, being developed by Persimmon which lies to the west. The site extends to 2.2 ha/5.5 acres with capacity to accommodate some 90 dwellings (See **Appendix 1**).
- 1.2. The Whaddon site was identified as the most sustainable location of all the south Gloucester fringe sites identified in the Issues and Options consultation.¹
- 1.3. In addition, the site is safeguarded as part of a wider allocation being promoted by Taylor Wimpey Homes for 2,000 dwellings to meet the future housing needs of Gloucester City as identified in Policy G2. It is unconstrained, with good public transport links and available for development and although it could be considered as part of the wider allocation, initial assessments indicate that the site could be brought forward as a stand-alone site providing its own highway, drainage and service infrastructure.
- 1.4. These representations rely upon the Stroud District Local Plan Review-Draft for Consultation November 2019 [SDLPR], its evidence base and related documents including the National Planning Policy Framework (NPPF) and National Planning Practice Guidance (NPPG).
- 1.5. The following sections put forward suggested changes to improve the SDLPR as it progresses towards submission to the Secretary of State.

¹ Stroud District Local Plan Review Emerging Strategy Consultation Report – Part Two November 2019 - page 47

2. POLICY BACKGROUND

- 2.1. The SDLPR is a comprehensive local plan combining strategic policies and detailed allocations. Newland notes that the strategic housing requirement is derived from the Gloucestershire Local Housing Needs Assessment 2019 [GLHN] prepared by Opinion Research Services, in accordance with the advice in the NPPF (paragraph 60).
- 2.2. The current NPPF (February 2019) altered the definition of affordable housing need to include those households that aspire to buy but cannot afford to do so. Newland notes that the GLHN identifies some 4,630 households in Stroud District and 6,370 households in Gloucester City that would fall within this category representing 54% and 72% respectively, of the LHN based on the standard methodology. The GLHN is clear that it is a policy decision as to whether and how those additional needs are met. Newland notes that the SDLPR proposes that generally 30% of housing is provided as affordable housing (Policy CP9).
- 2.3. However, it is unclear as to how the identified need for affordable housing for those who aspire to home ownership, but cannot afford to, is to be met.
- 2.4. Based on the above, Newland suggests that additional clarity be provided as to how the need for affordable home ownership is to be met.
- 2.5. The GLHN also sets minimum figures for the other Gloucestershire authorities (Gloucester City, Cheltenham Borough, Tewkesbury Borough, Cotswold District and Forest of Dean District). The strategic housing requirement for Gloucester City, Cheltenham Borough, Tewkesbury Borough is dealt with through a Joint Core Strategy, adopted in December 2017 (JCS).
- 2.6. During the examination of the JCS it became clear that meeting Gloucester's future housing needs will also rely on provision within Stroud District.
- 2.7. JCS Policy REV1: Gloucester and Tewkesbury Housing Supply Review recognises the issue of housing supply for Gloucester by requiring an immediate review on the adoption of the JCS. Progress to date is limited to an Issues and Options consultation which was completed in January 2019.
- 2.8. In addition, Table SP2a in the JCS identifies further potential of 1,518 dwellings be identified through the Gloucester City Plan and Newland has raised concerns that this is not achievable with consequential impacts on Gloucester City's housing land supply.
- 2.9. The JCS sets the principles for meeting unmet needs, in that they should be met where they arise. On this basis Newland considers that the identification of their land south of Grange Road within Policy G2 is essential to the proper planning of the area, without the need to rely on a future review of the JCS, the timetable for which, remains uncertain.

- 2.10. Based on the above Newland therefore suggests that Policy G2: Land at Whaddon be amended to allow for land to come forward under a memorandum of understanding with Gloucester City Council and that any shortfall in land supply for either authority be met at this location. This could be through the release of the site at Appendix 1 as part of a staged approach should the requirement be higher than 90d dwellings.
- 2.11. Newland notes and broadly supports the SDLPR priority to move the District towards becoming Carbon Neutral by 2030 and promoting development that reduces the District's carbon footprint. Core Policy DCP1 goes further in that it states that the District will become Carbon Neutral by 2050, setting five requirements for all new development seeking to reduce the need to travel, design to discourage the use of the private car, maximising green infrastructure, design to follow the energy hierarchy and design to reduce vulnerability to and resilience from the impacts of climate change.
- 2.12. However, Newland feels that the emphasis on location, non-car transport and low carbon energy sources does not support the selection of the strategic development location of Wisloe Garden Village (Policy PS37). For example, there is no evidence to demonstrate that a safe pedestrian/cycle route to Cam/Dursley Station can be achieved due to the width restriction of the railway bridge on the A4135.
- 2.13. Based on the above Newland therefore suggests that Policy PS37 is inconsistent with Core Policy DCP1 and the allocation should be re-considered.
- 2.14. In addition, Newland notes that there is no specific policy to encourage the development of low carbon homes rather than the broader considerations of travel and energy sources.
- 2.15. Based on the above Newland therefore suggests that a new policy should be included in the SDLPR to encourage low carbon home developments.

3. CHANGES TO ADDRESS ISSUES RAISED

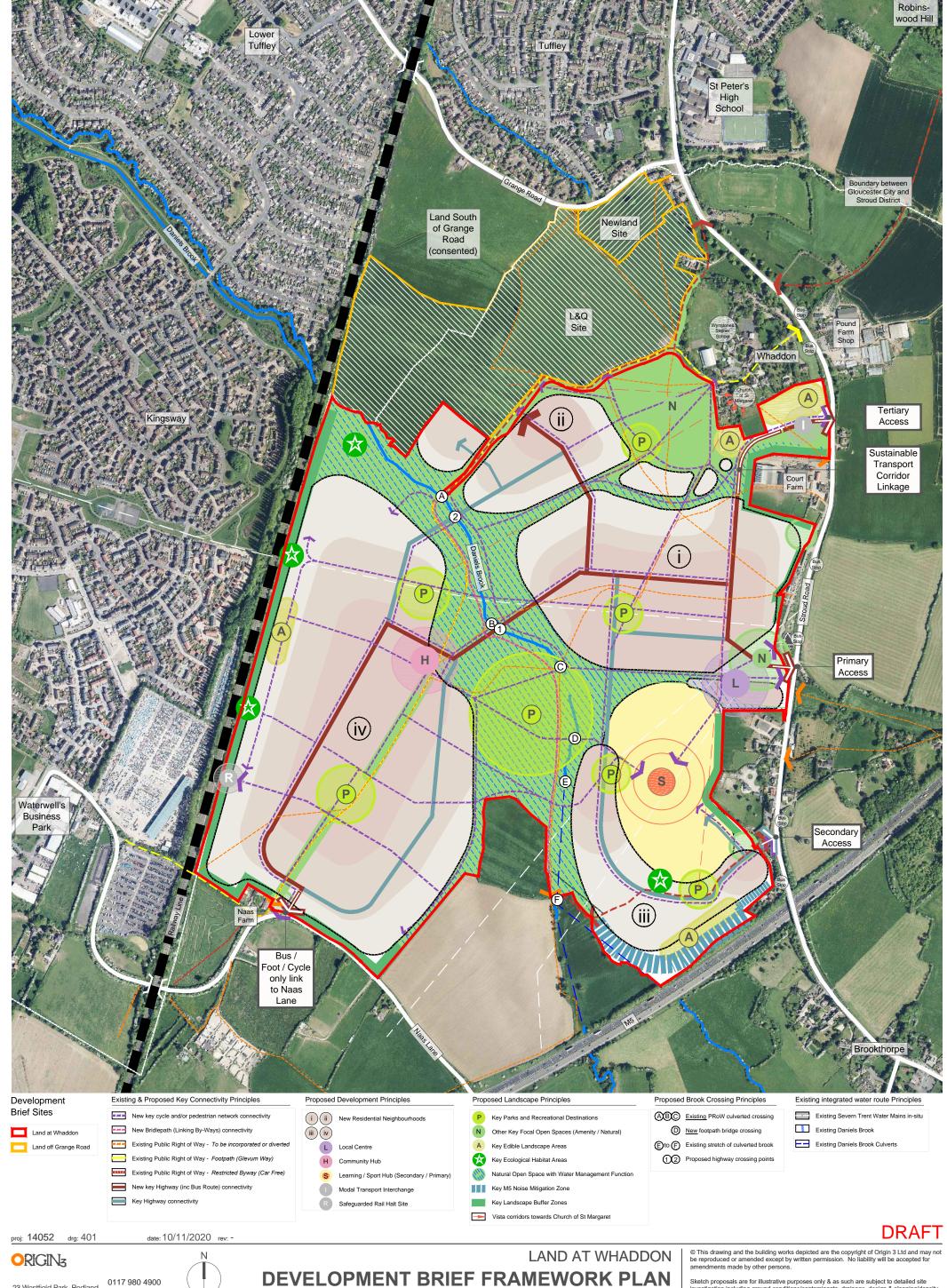
- 3.1. As set out above, the Stroud District Local Plan review November 2019 is largely supported. In order to address the issues identified Newland considers that:
 - a. land south of Grange Road as identified at Appendix 1, be identified to meet the needs of Gloucester under a memorandum of understanding with Gloucester City Council;
 - b. additional clarity be provided as to how the need for affordable home ownership is to be met;
 - c. Further consideration be given to the allocation of land at Wisloe in order to demonstrate compliance with Core Policy DCP1; and
 - d. a new policy be included in the SDLPR to encourage low carbon home developments.





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Whaddon Framework Masterplan APPENDIX 2



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Taylor Wimpey

Sketch proposals are for illustrative purposes only & as such are subject to detailed site investigation including ground conditions/contaminants, drainage, design & planning/density negotiations. Sketch proposals may be based upon enlargements of OS sheets & visual estimations of existing site features, accuracy will therefore need to be verified by survey.

APPENDIX 3 Highways Note



NEWLAND HOMES LIMITED

carl TONKS consulting

GRANGE ROAD, WHADDON, GLOUCESTER

Technical Note 1;

<u>Pre-Application Consultation, Transportation and</u> Highways for a

Proposed Development of up to 65 Homes

1. INTRODUCTION

- 1.1 cTc is commissioned by Newland Homes Limited (NHL) to advise in regard to transportation and highways matters pertaining to a proposal to develop a proposed housing allocation safeguarded in the emerging Stroud Local Plan. This report is compiled as part of a Pre-Application enquiry, in order to determine the issues of concern to the Local Planning Authority (Stroud District Council) and the Local Highway Authority (Gloucestershire County Council). Currently, development aspirations are of an indicative nature only and it is the purpose of this Pre-Application enquiry to understand the highway mitigation required in the vicinity of the site, should the proposals come forward in advance of the site being formally allocated for housing in the emerging Local Plan.
- 1.2 In order to permit greater depth of consideration of the key issues, **cTc** has reviewed information within the public domain in regard to adjacent committed developments. On the basis that consistency of approach and consideration is a key element of the Planning Process it is to be expected that comparisons with adjacent sites should enable an identification of the primary issues likely to determine the response to proposals for development of this site.
- 1.3 That consideration has supplemented **cTc**'s observations on site and understanding gained from many years of liaisons with Gloucestershire County Council (GCC) Highways Development Control officers on sites throughout the County including Gloucester City and adjacent to this site.



- 1.4 From the above previous local experience, staff and Directors of **cTc** are familiar with issues typically arising in this area of Gloucester, including having undertaken preliminary feasibility reviews of the adjacent (now committed) residential development on behalf of the former land owner.
- 1.5 In parallel with **cTc**'s consideration of access and off-site transport / traffic issues, NHL's Planning Consultant (RIDGE Property and Construction Consultants) have considered the planning merits of this site. For completeness, their appraisal is contained herewith at Appendix A.

2. SITE LOCATION, SURROUNDING INFRASTRUCTURE AND COMMITTED DEVELOPMENT

- 2.1 The site is located in Whaddon, south of and adjoining the suburban area of Gloucester. Grange Road forms the northern site boundary and connects Stroud Road in the east with Tuffley Lane to the north-west, via the residential area of Lower Tuffley.
- 2.2 The site's eastern boundary is formed by the rear of residential properties fronting Stroud Road; a significant north-south radial route connecting the City of Gloucester (in the north) with the Painswick Valley, at Pitchcombe (in the south). Grange Road is connected to Stroud Road via a priority T-junction a short distance to the north-east of the site frontage. The importance of Stroud Road for traffic movements into and out of Gloucester is reflected in a localised dualling arrangement of this junction, whereby right turners from Stroud Road into Grange Road are protected by a solid island, bollards, ghosting and a right turn lane to provide for safe deceleration and waiting to turn.
- 2.3 Both Grange Road and Stroud Road in the vicinity of the site benefit from street lighting and are subject to a 30mph speed limit. Grange Road is provided with a footway on the northern side, whilst the southern side has a verge, adjoining agricultural land. Several agricultural gateways are provided on the southern side of Grange Road, permitting movements of agricultural vehicles including four-wheel drive vehicles and tractors, with and without trailers.
- 2.4 To the north of Grange Road is the residential area of Tuffley, which is provided with local services common in such a residential environment. These typically comprise local shopping parades, including foodstores (eg Co-op at Seventh Avenue).
- 2.5 Tuffley Primary School is also located in very close proximity to the site's northern boundary. St Peters Roman Catholic High School is located very close and convenient to the site, on the eastern side of Stroud Road and the shared campus of Harewood Junior School and Beaufort Cooperative Academy are located a short distance away, in Lower Tuffley.
- 2.6 Locations of facilities generating regular visits are conveniently close to the site and offer the real potential for access predominantly by sustainable modes, specifically walk and cycle.



- 2.7 At the northern end of the localised dualling on Stroud Road described above, two bus stops are provided adjacent to St Peters Roman Catholic High School. Although their location is clearly designed to be convenient for use by pupils of the school, these stops cater for service bus number 63, which connects Forest Green (Nailsworth) with Gloucester Transport Hub, at the Railway Station. This provides an hourly service, from Tuffley to the City's Transport Hub (a fifteen minute journey time), starting at 07:00 and ending at 19:00. Return journeys (thirteen minute travel time) leave the City's Transport Hub also on a broadly hourly frequency from 07:00 until 19:55. Outbound services leave Tuffley roughly hourly, from 07:13 until 20:07 and take of the order of twenty five minutes to reach Stroud Merrywalks. Returns from Stroud to Tuffley are available every hour from 06:38 until 18:38 and provide a journey time of around 37 minutes.
- 2.8 It is clear from the above that the site location makes commuting into either Gloucester or Stroud a reasonable prospect which does not require use of the private car. Similarly, onward travel via Gloucester City Transport Hub permits national rail journeys with ease, using only public transport for the entre journey.
- 2.9 The site is clearly well located in terms of sustainable travel opportunities.
- 2.10 In terms of car use; Grange Road provides a high quality, high capacity connection to Stroud Road to the east and into Gloucester via Cole Avenue, the City's effective southern circular route to the north-west. The connection with Cole Avenue is achieved via a large and high capacity traffic signal-controlled junction, whilst the connection with Stroud Road is as described above. In regard to the site which is the subject of this Pre-Application consideration, it is considered that Stroud Road is likely to provide the most popular route into Gloucester, given both its proximity to the site frontage / access and also its high traffic capacity.
- 2.11 Land to the south of Grange Road is allocated for residential development and Persimmon Homes have consent to develop a site to the west of the NHL proposal. National Planning Policy Guidance requires development promotions to account for cumulative traffic impact of proposed developments, including committed schemes, hence the adjacent Persimmon scheme is of direct relevance to the NHL promotion. Furthermore, and in light of the analyses submitted in support of that site having been agreed with the LHA in successfully pursuing Planning Permission, the supporting information which is clearly in the Public Domain, provides an appropriate reference source for this Pre-Application submission on behalf of NHL.



3. THIRD PARTY SUBMISSIONS, TRANSPORT AND TRAFFIC OPERATION

- 3.1 Reference to the Transport Assessment (TA) submitted in support of the adjacent residential development and forming a material part of that consent (hence agreed with the Local Highway Authority (LHA), GCC), has confirmed cTc's empirical observation that the junction of Grange Road with Stroud Road exhibits substantial spare capacity and is therefore not regarded as likely to present any material constraint to development of land adjacent to Grange Road.
- 3.2 Notwithstanding the above, traffic heading towards Gloucester City Centre via Stroud Road requires to pass through the St Barnabus Roundabout, which is a known traffic capacity constraint on the southern side of the City. Congestion issues have been evident at this location for many years and staff of cTc have experience of negotiating with highways officers in regard to issues arising at this location for over 20 years. Reference to the agreed TA mentioned above confirms this fact via data collection and capacity analyses presented therein.
- 3.3 These agreed analyses suggested junction operation at a design year of 2021, including the proposed (now committed) residential development off Grange Road, as broadly described in Table 3.1, below. The Table summarises in real terms what the analyses presented in the submitted TA indicate for St Barnabus Roundabout. cTc has noted some minor irregularities between comparative scenarios and this appears to carry over to the PICADY analyses of the Stroud Road / Grange Road junction also, however, the purpose of this report is to identify areas justifying further investigation in support of the current NHL proposals, not to second-check the previously submitted and agreed analyses for nearby third party developments.

Table 3.1; Summary of Capacity Analyses of St Barnabus Roundabout Presented in Support of Committed Residential Development off Grange Road

Junction Arm	Description of Operation	Queue Lengths
Stroud Road North	Within design capacity	Order of 5 vehicles
Finlay Road	At or marginally over design capacity	Order of 8 vehicles
Reservoir Road	37% above absolute capacity	Up to 145 vehicles
Stroud Road South	35 – 40% above absolute capacity	Up to 230 – 240 vehicles
Southern Avenue	Within design capacity	Order of two vehicles

3.5 The above provides an appropriate description of **cTc**'s observations of the operation of this key local node and form a reasonable basis for consideration of the NHL proposals.



3.6 cTc has extracted from the agreed TA the base traffic survey data for St Barnabus Roundabout. This comprised a Manual Classified Count (MCC) of the junction and the extracted peak hour traffic demand is illustrated below, where;

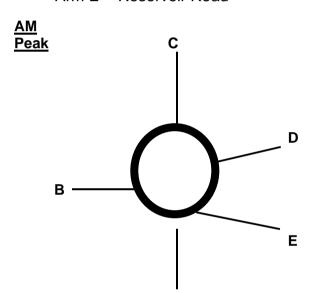
Arm A = Stroud Road south (in the direction of the site)

Arm B = Southern Avenue (essentially forming the western portion of the Gloucester City Bypass; A38)

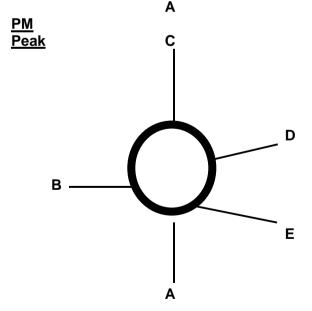
Arm C = Stroud Road north (in the direction of the City Centre)

Arm D = Finlay Road (eastern portion of the Gloucester City Bypass; A38)

Arm E = Reservoir Road



	2015 Su Data	<u>irvey</u>			
	A	В	С	D	Е
Α	0	37	290	370	86
В	147	0	130	322	84
С	269	158	0	132	78
D	201	381	283	0	18
Е	78	217	87	11	0



	2015 Sur Data	<u>vey</u>			
	Α	В	С	D	Е
A	0	15	155	260	99
В	177	0	97	353	129
С	347	186	0	65	135
D	180	358	190	0	7
Е	114	297	82	13	0



3.7 Although the approved TA did growth the above figures to a design year of 2021, in light of the age of the analyses, **cTc** has repeated this procedure using current TEMPro values. These current growth rates (1995 to 2021) are summarised in Table 3.2, below.

Table 3.2; Calculation of TEMPro growth factors for Gloucester (1995 – 2021)

Period	Arrivals	Departures	Average
AM Peak	1.0826	1.0620	1.0723
PM Peak	1.0594	1.7190	1.0594

3.8 Applying the above TEMPro factors to the 2015 base traffic data results in the Origin / Destination (OD) matrices as provided below.

AM Peak Hour

2021 Growthed Base

_	FIOWS	_	_	_	_	
	Α	В	С	D	Е	TOTAL
Α	0	40	311	397	92	840
В	158	0	139	345	90	732
С	288	169	0	142	84	683
D	216	409	303	0	19	947
Е	84	233	93	12	0	421
TOTAL	745	850	847	895	285	

PM Peak Hour

2021 Growthed Base

_	<u>Flows</u>	_	_	_	_	
	Α	В	С	D	Е	TOTAL
Α	0	16	166	279	106	567
В	190	0	104	379	138	811
С	372	199	0	70	145	786
D	193	384	204	0	8	788
Е	122	318	88	14	0	543
TOTAL	877	918	562	741	397	

3.9 Reference to the same agreed TA identifies the residential traffic generation rates as summarised in Table 3.3, below, which also applies these rates to the proposed development scale of 65 dwellings to result in a traffic generation of the likely maximum development size sought by NHL.



Table 3.3; Application of Agreed Traffic Generation Rates to NHL Proposals

Period	Rate / HH		Scale	Traffic Generation	
Period	Arrivals	Departures	Scale	Arrivals	Departures
AM Peak	0.158	0.410	65	10	27
PM Peak	0.367	0.216	65	24	14

3.10 Also agreed in the submitted TA is a traffic assignment of 49.7% to and from Stroud Road north, which consequently flows through the St Barnabus Roundabout. Table 3.4, below applies this traffic assignment to the forecast NHL generated traffic.

Table 3.4; Traffic Assignment North of Stroud Road (to/from St Barnabus)

Period	Total Traffic		Dist %	N on Stroud Rd	
Period	Arrivals	Departures	DISt 76	Arrivals	Departures
AM Peak	10	27	40.70	5	13
PM Peak	24	14	49.70	12	7

- 3.11 The Planning Consent for the adjacent residential site was achieved on agreement that the developer would contribute towards future improvement of St Barnabus Roundabout in broad proportion to the agreed percentage impact of development generated traffic over and above baseline flows at year of opening. Using year of opening removes the bias which would otherwise be added due to background traffic growth effectively reducing the proportional impact of generated traffic year on year.
- 3.12 Unfortunately the information available on the Planning Portal does not provide a detailed cost estimate for the St Barnabus Roundabout improvement scheme, as used for this exercise. Neither does it include a description of those works. What is included however is a note of the agreed percentage impact of generated traffic, at 10.3% and the resultant cost contribution sought, at £102,648. These figures imply a whole construction cost estimate of £996,583, which can reasonably be rounded to £1,000,000.
- 3.13 A comparison of the traffic assignment calculated in Table 3.4, above with the forecast 2021 base traffic demand at St Barnabus Roundabout permits the process described in Paragraph 3.12 to be replicated for the NHL proposals.



- 3.14 In the following calculation, **cTc** has compared generated traffic on the Stroud Road south arm of St Barnabus with base traffic on that arm. From the information available it is unclear whether the agreed impact calculation had been applied to total traffic entering and leaving the roundabout or simply to certain arms. To ensure robustness, **cTc** has undertaken the calculation based solely on traffic entering and leaving St Barnabus on Stroud Road south. Given that this is the arm on which all development traffic is concentrated, the result will be more onerous. The calculation is summarised below:
 - AM Peak Hour generated traffic on Stroud Road, south of St Barnabus Roundabout = 13 (to St Barnabus) + 5 (from St Barnabus) = 18 (two way)
 - PM Peak Hour generated traffic on Stroud Road, south of St Barnabus Roundabout = 7 (to St Barnabus) + 12 (from St Barnabus) = 19 (two way)
 - AM Peak Hour base traffic on Stroud Road, south of St Barnabus = 745
 (to St Barnabus) + 840 (from St Barnabus) = 1,585 (two way)
 - PM Peak Hour base traffic on Stroud Road, south of St Barnabus = 877
 (to St Barnabus) + 567 (from St Barnabus) = 1,444 (two way)
 - Combined peak hour proportional impact = (18 + 19) / (1,585 + 1,444) = 0.012, or 1.2%
 - £1,000,000 x 1.2% = £12,000
- The above calculation presents a repeat of the agreed impact and improvement analyses undertaken and agreed in respect of the adjacent committed residential development. Consistency of decision-making is a key and essential component of the Planning System, hence it is anticipated that consideration of this important issue in regard to a forthcoming Application from NHL will be undertaken on a similar basis to that summarised above. Given that the St Barnabus works are not yet undertaken, it could be suggested that the construction cost estimate used in the above calculation may be out of date, hence is likely to understate the likely cost. Whilst there is some truth in this it should also be noted that the above calculation has purely replicated the agreed calculation for the adjacent site and has not added into that calculation the traffic generated by that calculation, which is at this stage to be considered as committed development traffic. It is likely that the increased contribution which would result from construction cost inflation would be offset by the reduced proportion due to accounting for additional base traffic. At this stage and for clarity it is suggested that the above calculation should be used without further adjustment.



4. DATA COLLECTION

- 4.1 In the above review, **cTc** has accessed reports submitted in support of the adjacent development and agreed with GCC. These data are in the Public Domain and are therefore able to be referred to and relied upon.
- 4.2 Given that the Application in question, which is undoubtedly the most relevant local Planning Application, dates from 2016. The survey data relied upon clearly predates this and is from 2015, hence now 5 years old. **cTc** accepts that this data is at the extremity of reliable age of traffic data and should therefore be treated with caution. Under normal circumstances and faced with historic data of age 5 years, **cTc** would suggest undertaking new traffic surveys, however, the current implications of the ongoing pandemic make it inappropriate to currently collect new data.
- 4.3 It is unreasonable to require the Planning System to wait an unknown period until the pandemic lockdown is released in its entirety, plus allowing for traffic flows to slowly re-establish themselves thereafter, as this would cause unacceptable delay and economic impact on the development proposals. On this basis, **cTc** proposes to use and rely on data sourced from the above reports, factored using appropriate source data (NTEM via TEMPro), as a basis for the Transport Assessment in support of the NHL proposals.

5. FUTURE YEAR FORECASTS

- 5.1 As referred above, TEMPro will be used to access the NTEM values in order to factor all traffic flows up to an indicative year of opening of the proposals of 2021. Whilst some Authorities request examination of highway operation at a Design Year beyond year of opening, in this instance it is not considered appropriate for a number of reasons, specifically;
 - NTEM provides accurate observed traffic figures for past years, hence enabling accurate growthing of the 2015 traffic observations to date.
 - Forecasting of future traffic growth is based on economic forecasts, initially from a National model, then disaggregated to local level. It is widely acknowledged that the current ongoing pandemic will inevitably harm the UK's (and the World's) economy, however, the degree to which this is likely to occur is currently unknown and hence, so is the impact on traffic growth patterns.
 - The effects of social distancing required in support of measures to combat the pandemic create significant difficulties for operation of public transport networks, particularly in regard to capacity. It is currently entirely unknown to what extent this is likely to impact in regard to differential growth between modes of transport.



- In the short term it is likely that a mode-shift away from public transport could result, along with an associated increase in the other modes. It is, however, wholly unclear to what extent this is likely to occur and what will be the resultant impact on traffic growth.
- In regard to the above and as identified earlier in this report, traffic growth beyond year of opening has the effect of reducing the proportional traffic impact of the development proposal, hence analysing at year of opening only not only provides the most accurate scenario, but also the most onerous in regard to assessing scale of impact.
- 5.2 For the above reasons it is proposed to assess highway operation at a nominal year of opening of 2021 only, with no future year forecast beyond.

6. GEOGRAPHIC SCOPE OF ASSESSMENT

- 6.1 In light of the low levels of traffic generation forecast in association with these proposals; comprising only some 37 and 38 vehicles per hour (two-way) during the highway peaks, it is considered unlikely that material traffic impact will be experienced beyond a fairly tightly constrained geographic cordon, comprising;
 - Proposed site access junction;
 - Existing junction of Grange Road / Bybrook Road; and,
 - Existing junction of Grange Road / Stroud Road.
- 6.2 Operational capacity analyses of the above junctions will be undertaken using industry standard PICADY computer software and these will be supplemented with road traffic injury accident analyses across the same network.
- 6.3 In addition an audit of non-motorised user (NMU) infrastructure, comprising footways, cycleways and public transport opportunities will be undertaken. This will be considered in light of the forecast generation of journeys by each mode in order to confirm that adequate capacity is available to cater appropriately for each mode.

7. OTHER CONSIDERATIONS

7.1 In combination with the committed development a short distance to the west, the NHL proposals represent an element of a significant proposed allocation for residential enlargement of Whaddon and Tuffley. It is likely that surrounding land may also come forward in regard to this draft allocation. From cTc's initial investigations, along with experience and general understanding of the traffic issues arising in and around Whaddon and Tuffley, it is clear that an access solution can be provided into the NHL site which would neither prevent nor frustrate access(es) to the remaining land in this vicinity, should that be brought forward in the future..



8. CONCLUSION

- 8.1 It is **cTc**'s view that the above proposed scope of assessment provides for a detailed portrait of the future demand for movement by all modes, with and without the NHL proposed development in place. This will permit a comprehensive assessment of impact and identification of any infrastructure improvements required to bring forward NHL's proposed development of up to 65 dwellings on this site.
 - The methodology responds to the constraints of the current pandemic in regard to data collection;
 - It remains fair and equitable with the previous consideration of the adjacent site in regard to financial contribution to long known local infrastructure deficiencies:
 - It will ensure an identification of operational implications of the proposals across local infrastructure nodes; and,
 - It will permit resultant impact to be appropriately mitigated.
- 8.2 Furthermore, Access Arrangement Plan 2019-B-034-001 (Appendix B) confirms that access to the site can be achieved via a priority T junction onto Grange Road providing visibility splays of 2.4m x 43m in either direction. This is commensurate with the existing 30mph speed limit.

Client:		Newland Homes	Limited		
Project Name:		Grange Road, W	Grange Road, Whaddon		
Project Number		2020-F-005			
Report Title:		Technical Note 1 – Highways Pre-App			
Created by:		Date:	July 2020		
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Approved by:	carl@tonks-consulting.co.uk	Date:	July 2020		
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APPENDICES



APPENDIX A RIDGE PLANNING APPRAISAL



Head of Development Management Stroud District Council Ebley Mill Stroud GL5 4UB 21 July 2020



Dear

Re: Pre-application meeting Request Land south of Grange Road, Whaddon for Newland Homes

I trust you are well.

This letter comprises a pre-application meeting request, made on behalf of Newland Homes Limited (Newland), for land south of Grange Road, Whaddon.

The site is located adjoining the City Council boundary and in very close proximity to the site approved by the City Council for 250 dwellings, being developed by Persimmon which lies to the west. The site is unconstrained and available for development.

A separate request is made to the local highway authority by Newland's transportation consultant, Carl Tonks consulting (cTc). CTc's technical note is included with this letter. You will note that this concludes that the development of Newland's site can be accommodated with limited and proportional improvements to the highway network.

As part of their design team Newland has also appointed All Ecology (Walkover Survey attached) and MHP whose advice on landscape and visual considerations has informed the attached Concept Sketch Layout for approximately 54 plots, though capacity could be up to 10 units more.

Planning policy position

As you are aware, the site is not allocated in the Stroud District Local Plan adopted in November 2015 and falls outside of any currently defined settlement boundary.

However, the adopted Local Plan is out of date in terms of the requirements of the NPPF and is in the process of review. The site falls within the area defined to meet the future housing needs of Gloucester City or Stroud District in the emerging Stroud Local Plan (G2 Land at Whaddon for a strategic mixed use development including approximately 2,500 dwellings) and is unconstrained and available for development.

The need for development on the edge of Gloucester in Stroud District has been established in the development plan and decision making for a considerable time.





Proposed site G2 is promoted by Newland Homes, Taylor Wimpey and L&Q Estates as was supported at the Local Plan Review consultation with the submission of a Vision Document by Taylor Wimpey to demonstrate principles of how 2,000 dwellings can be developed.

The current strategic planning policy for Gloucester City, the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy 2011 – 2031 (JCS), adopted in December 2017, recognises that at the time of adoption the JCS was unable to meet the identified needs of Gloucester and a specific policy (REV1: Gloucester and Tewkesbury Housing Supply Review) requires an immediate review of the JCS to address that issue. To date, little progress has been made on that review.

However, JCS Policy SP2 [Distribution of New Development] requires 'at least' 13,287 dwellings be provided within the Gloucester City administrative boundary, and three urban extensions adjoining the City, in Tewkesbury Borough [and sites covered by any Memoranda of Agreement], (my emphasis).

As set out above, Newland are working with the other promoters and a joint masterplan document to support the allocation is in preparation with submission to the Council expected in late summer 2020 to coincide with the next formal stage of the Local Plan Review.

Despite the site continuing to form what is expected to be the very first phase of this proposed strategic allocation the site can be justifiably delivered immediately as a stand alone development, ensuring it would not compromise future delivery of the wider allocation. Our masterplan for the site provides a well-considered approach which address the site boundaries ensuring a landscape edge to the land parcel, along with both highway and footpath links to adjacent development opportunities.

Concept Sketch Layout demonstrates that the site can be brought forward without compromising the delivery of the strategic allocation.

Therefore, in addition to the advice on the content of the application, given the current and emerging strategic policy support for this site, I would be grateful for the input of the District and City councils' policy team leaders on the timing of such an application.

I note that meetings are not currently being provided and therefore a written response will be provided. I would be grateful to review a draft before formal issue. Please also inform me of the appropriate fee.

Please do not hesitate to contact me should you need any additional information and I look forward to hearing from you.

Yours sincerely



Associate Planner
For Ridge and Partners LLP



Enclosures:

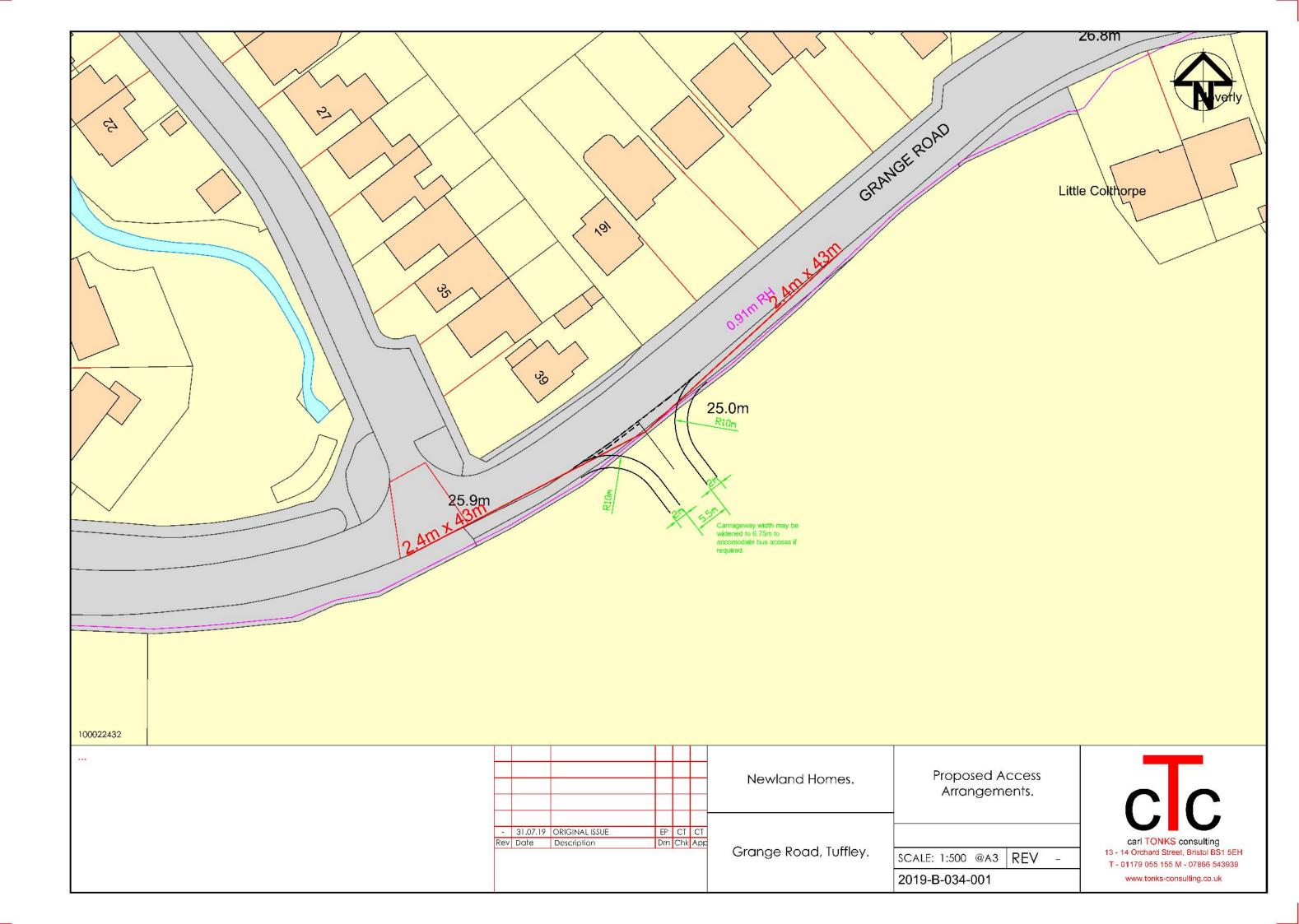
Concept Sketch Layout

Ecological Walkover Survey

Highways and Transport Technical Note
CC:



APPENDIX B ACCESS ARRANGEMENT PLAN 2019-B-034-001



APPENDIX 4 Ecology Walkover Survey



Land off Grange Road, Tuffley, Gloucester, GL4 0DJ.

Walkover Survey



April 2020

All Ecology Ltd

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Document Control

Site: Land off Grange Road, Tuffley, Gloucester, GL4 0DJ

Title: Walkover Survey

For: Newland Homes

Project Number: 2063

Document Version: 1.0

Survey Date(s): 3rd April 2020

Document Date: 14th April 2020

Version	Date	Version Details	Prepared by	Reviewed by	Approved by
1.0	14/04/20				



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Notice to Readers:

The results of the survey and assessment work undertaken by All Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

All Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

All Ecology cannot accept responsibility for data collected from third parties.

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

Executive Summary

In April 2020, All Ecology Ltd was commissioned to undertake a Walkover Survey of a site known as Land off Grange Road, Tuffley, Gloucester, GL4 0DJ. The site is part of a grassland field, which contains short vegetation that is subject to grazing. The site is bound by fencing, wall and species-poor hedge with other boundaries open to the surrounding landscape.

The site is approximately 2.1 Ha in size and is the subject of a proposed planning application to permit the construction of approximately 65 new residential dwellings with associated gardens, access roads and parking.

The effect of the development has been considered and key constraints identified. The habitats present on site are of low to moderate ecological value. The key losses would be a section of the northwest boundary hedge to enable access into the site from Grange Road. Therefore, a Hedgerow Assessment will be required to determine if the hedge is classified as 'important' under the Hedgerow Regulations 1997. It is unlikely to qualify in terms of its ecological value but it may have historical significance.

Suggestions for maximising ecological gains through habitat creation are given.

The habitats on site have the potential to support a range of protected or notable species. The following species/groups are either present or potentially present and the recommended actions are as follows:

- Bats The boundary hedge and trees provided suitable foraging habitat. A section of this boundary hedgerow will be removed to allow a new access road to be created. The hedge is low and is poorly connected to the wider area. The hedge is unlikely to be important for commuting bats, and therefore a bat activity survey is not required. New tree and shrub planting on the site will compensate for the small loss of foraging habitat. Suggestions for mitigation and enhancement are given.
- Birds Nesting and foraging habitats across the site. No further surveys at this time but any
 vegetation clearance should be undertaken outside the bird nesting season unless a pre-works
 survey confirms absence. Suggestions for mitigation and enhancement given.

Suggestions for maximising ecological gains through habitat creation are given.

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1.0 Introduction

Background

- 1.1 In April 2020, All Ecology Ltd was commissioned to undertake a Walkover Survey of a site known as Land off Grange Road, Tuffley, Gloucester, GL4 0DJ. The site is part of a grassland field containing a small number of standard trees and a hedgerow that forms the northwest boundary. The northeast boundary is formed by fence and wall which is shared with the outer boundaries of the adjacent residential gardens. The remaining boundaries are open to the surrounding grassland habitat. The site is located on the southern edge of the city of Gloucester and is surrounded by other grassland fields to the south, a housing development under construction to the west of the site, and a large area of woodland 700 m northeast.
- 1.2 The site is approximately 2.1 Ha in size and is the subject of a proposed planning application for a housing development of approximately 65 new residential dwellings with associated gardens, access roads and parking.

Objectives and Aim

1.3 The main objectives and aim of the survey were to identify features of ecological interest, undertake a basic search of habitats present for evidence of use, or potential use, by protected species, and to identify any other possible ecological constraints to the proposed development.

Site Location



Figure 1: Site location plan.

Arial photograph



Figure 2: Arial photograph indicating site boundaries.

2.0 Methodology

Personnel

The survey was carried out by an ecologist with over 13 years' experience working as a consultant. has extensive experience of managing environmental contracts, and particular experience in surveying, assessment and mitigation for rare and protected species. He has considerable knowledge of the development and planning process including Ecological Impact Assessments, sustainable ecological design and he has completed ecology chapters of Environmental Statements. holds a number of protected species licences including bats (all species, all counties, Class Licence Registration No. 2015-12313-CLS-CLS), and Great Crested Newts (Class Licence Registration No. 2016-20363-CLS-CLS). He has successfully obtained European Protected Species mitigation licences for a number of bat species including Lesser Horseshoe, Greater Horseshoe, Serotine, Brown Long-eared, Common Pipistrelle and Natterer's bats, for a number of roost types including maternity and hibernation sites.

Habitat Survey

2.2 The site was visited on the 3rd April 2020 and surveyed in accordance with the Joint Nature Conservation Committee (JNCC) Phase I Habitat Survey methodology (JNCC, 2010). This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential that might warrant further study.

Fauna

- 2.3 The trees were assessed for their potential to support bat roosts by visually inspecting them from the ground using binoculars and high-powered torches where appropriate. Potential roosting features such as gaps, holes, enclosed roof voids, holes, cavities or splits were recorded and then inspected where possible for signs of bats, which including grease/urine stains, scratch marks, droppings or the bats themselves.
- 2.4 The site and surroundings, for a minimum distance of 30 m where access was available, were searched for signs of Badgers. These include setts, latrines, dung pits, snuffle marks or hairs caught in hedges or on fencing.
- 2.5 A casual search for evidence of Dormice such as nests and/or gnawed nuts was also carried out.
- 2.6 Incidental observations of invertebrates and birds were recorded and a search made for any signs of current or previous nesting.
- 2.7 Any refugia on site such as logs or other debris were lifted and inspected for reptiles and amphibians. There were no ponds on site but ponds within 250 m of the site were subject to the Great Crested Newt Habitat Suitability Index (HSI) Assessment to determine their suitability for this species.

Equipment

2.8 Equipment used to aid the survey included a high-powered torch, binoculars and a camera.

Valuation of Ecological Features

- 2.9 The valuation process used in this report follows the Guidelines for Ecological Impact Assessment in the UK and Ireland from the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018).
- 2.10 The value of areas of habitat and plant communities has been measured against published criteria where available. Biodiversity Action Plans (BAPs) have been searched to identify whether action has been taken to protect all areas of a particular habitat and to identify current factors causing loss and decline of particular habitats. The presence of injurious and legally controlled weeds has also been taken into account.
- 2.11 When assigning a level of value to a species, its distribution and status (including a consideration of trends based on available historic records) has been taken into account. Other factors influencing the value of a species are: legal protection, rarity and Species Action Plans (SAPs). Guidance, where it is available, for the identification of populations of sufficient size for them to be considered of national or international importance has also been taken into account.

Nomenclature

2.12 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. Vascular plants and charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2007) with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (http://www.nhm.ac.uk/nbn/), which is managed by the Natural History Museum.

Limitations

2.13 The site was fully accessible with no limitations to the survey.

3.0 Results

Habitats

- 3.1 The following habitats or vegetation types were identified during the course of the habitat survey:
 - Poor semi-improved grassland
 - Species-poor hedge
 - Standard trees
 - Fence
 - Wall

Poor semi-improved grassland

3.2 The site formed part of a large grassland field that is subject to regular grazing resulting in a generally short sward height. The grassland was dominated by Perennial Rye-grass with frequent Cock's-foot, Creeping Buttercup and White Clover. There was occasional Lesser Celandine, Daisy, False Oat-grass, Fescue sp., with rare occurrences of Bristly Oxtongue and Dandelion.



Photograph 1: General view of site showing poor semi-improved grassland.

Species-poor hedge

3.3 The northwest boundary is formed of species-poor hedge adjacent to timber post and wire fence. The hedge appeared to be regularly cut and consisted of dominant Hawthorn, with occasional Bramble agg., Ivy, Spindle, and Blackthorn. The Blackthorn was found to be more frequent towards the north corner of the site. Within the hedge was also rare occurrences of Sycamore. Ground flora comprised of frequent Lesser Celandine, Lords-and-ladies and occasional Cleavers, Common Nettle, Cow Parsley, Ground-ivy and rare Red Dead-nettle.



Photograph 2: Species-poor hedge along the northwest boundary.



Photograph 3: Ground flora adjacent to the hedge.

Standard trees

3.4 There were a small number of mature Pedunculate Oak trees, most of which were situated adjacent to the boundary hedge within the northwest section of the site.



Photograph 4: A single Pedunculate Oak located within grassland and a further oaks located adjacent to the boundary hedge.

Fence and wall

3.5 The northeast boundary was formed of timber fencing and a short section of brick wall that is shared with the gardens of the adjacent residential dwellings.



Photograph 5: Fencing to the rear of the adjacent gardens.



Photograph 6: Fencing and wall that define the adjacent gardens.

Fauna

Bats

3.6 The oak trees on site were inspected for potential roosting features such as rot holes, flaking bark, tree splits etc of which none were found. The site provides generally poor foraging and commuting habitat for bats over short grassland and trees as well as along the northwest boundary hedge. The northwest hedge is poorly connected to the wider area and therefore unlikely to be important to commuting bats.

Badgers

3.7 The grassland on site provides good foraging habitat for Badgers but only limited potential for the construction of setts, mainly along the northwest boundary hedge. The site and immediate surroundings were searched for evidence of Badgers such as dung pits, latrines, digging, hairs, snuffle marks of which none were found. It is likely that Badgers are generally absent from site but they may pass through on occasion.

Otters and Water Voles

3.8 There are no watercourses on site and the small stream located on the opposite side of Grange Road had very limited potential for these species with no evidence of their presence. Otters and Water Voles are considered to be absent from the site.

Dormice

3.9 The site provides potential Dormouse habitat in the northwest boundary hedge; however, this habitat is poorly connected to the wider area where habitat is also scarce. The potential for the presence of Dormice within this hedgerow is considered to be negligible.

Other mammals

3.10 The grassland and hedgerows provide some habitat for common mammals; however, any potential for other protected species of mammals on site is regarded as minimal.

Birds

3.11 The site provides potential foraging habitat in the form of hedges and trees with the short grassland providing limited foraging opportunities. The site also provides nesting opportunities for birds in the hedges and trees. The grassland was short and heavily grazed and considered to be unsuitable for ground nesting birds. The site was surveyed within the bird nesting season of March – August and a disused nest was present in the mature oak tree near the centre of the grassland. No further nests were found within the hedges or trees; however, some may have been missed within the denser vegetation and it is likely birds will nest within these habitats in future.



Photograph 7: Unused bird nest in an Oak tree.

Reptiles

3.12 The site provides only limited, isolated potential reptile habitat in the form of the northwest boundary hedge. However, this is associated with short grassland which, provides poor opportunities for reptiles. Reptiles are considered to be absent from the site.

Amphibians

3.13 The site provides limited terrestrial amphibian habitat within the northwest boundary hedge but the grassland is poor and there were no ponds on site. With regards to the specially protected Great Crested Newt there was one pond within 250 m of the site. In summary this pond scored 0.44 and is rated as 'poor' in terms of its suitability for this species. Where a pond scores below the 0.5 threshold, further surveys are not required. Full details and location of the pond are presented below.

Table 1: HSI calculations

HSI Calculator	Pond 1	
SI1 - Location	1	1
SI2 - Pond area	2	0.2
SI3 - Pond drying	3	0.1
SI4 - Water quality	4	0.33
SI5 - Shade	5	0.3
SI6 - Fowl	6	1
SI7 - Fish	7	1
SI8 - Ponds	8	0.75
SI9 - Terr'l habitat	9	0.67

SI10 - Macrophytes	10	0.3
HSI Score	Score	0.44

3.14 The pond was located approximately 130 m southeast of the site and was approximately 120 m² in size. The pond had little water remaining and is likely to dry annually. The pond had poor water quality and had no macrophyte cover. The pond was surrounded by trees; however, beyond this narrow band of vegetation is short grassland and hardstanding. The pond was heavily shaded and appeared to have no fish or waterfowl.



Figure 2: Pond location plan.

Invertebrates

3.15 The hedge and trees provide the most important invertebrate habitats on site with the grassland currently providing limited invertebrate opportunities due to a lack of flowering species and short sward. However, whilst the site will support a range of common invertebrate assemblages, the potential for notable or protected species is low.

4.0 Development Constraints and Recommendations

Development Proposals

4.1 The site is approximately 2.1 Ha in size and is the subject of a proposed planning application to permit the construction of a housing development of approximately 65 new residential dwellings with associated gardens, access roads and parking.

Habitats

- 4.2 The NERC Priority Habitats include all hedgerows with at least 80% cover of at least one woody UK native species (JNCC, 2020). The hedge along the northwest boundary consisted of UK native species and so qualifies as NERC Priority Habitat. A new entrance is to be created near the centre of this boundary hedge and therefore a Hedgerow Assessment will be required to determine if the hedge is classified as 'important' under the Hedgerow Regulations 1997. It is unlikely to qualify in terms of its ecological value but it may have historical significance.
- 4.3 New hedges are likely to be planted around the site and the following mix is suggested to encourage wildlife: Hawthorn 40%, Blackthorn 15%, Hazel 10%, Field Maple 10%, Holly, Dogrose, Spindle, Wild Privet and Wych Elm, all 5%.
- 4.4 The grassland was surveyed outside the optimal period for grasslands but it was evident that the grassland was species-poor and could only be classified as improved/poor semi-improved grassland. This is subject to heavy grazing and the grassland may be more diverse than that recorded but based on the findings it did not appear that grassland was likely to be important. In order to qualify as a NERC Priority Habitat, grassland typically has to be unimproved (good semi-improved grassland can also qualify) and would have to be examples of grasslands such as lowland calcareous grassland or lowland dry acid grassland, habitats not found on site.
- 4.5 The remaining habitats e.g. standard trees do not qualify as NERC Priority Habitats.
- 4.6 It is understood that new ponds may be included within the development. If possible, any new ponds created should be a minimum of 1 m deep, to provide well insulated areas from extremes in temperatures. The pond edges should not be straight and there should be a sloping aspect at one side of the pond to allow wildlife to get in and out. Shallow shelved areas should also be created to provide a diversity of conditions for flora and fauna.
- 4.7 Ponds should be planted with native local plants with non-native plants being avoided. The deeper areas of the pond should be planted with submerged and oxygenating plants such as Common Water-crowfoot, Curled Pondweed and Water Violet. Floating-leaved plants such as Water-lilies and Broad-leaved Pondweed should also be planted here. In the marginal, more shallow areas of the pond, marginal plants such as Water Mint, Marsh Marigold, Water Plantain, Yellow Iris and rushes should be planted.
- 4.8 Ponds should be allowed to fill naturally as the use of tap water can contain chemicals and cause changes in temperature.
- 4.9 In terms of the on-going management of the ponds, the pond should aim to have about 50% open water and 50% marginal vegetation. If nutrient levels are high in the pond then marginal vegetation will increase rapidly. If this is the case, any excess vegetation should be removed in

September when most animals have completed their lifecycles, but before animals start to hibernate. Any removal of vegetation should only take place in one half of the pond, leaving the rest for the next year. Any collected sediment and vegetation should be left at the side of the pond for at least 24 hours to allow any trapped animals crawl back in. Autumn leaves should also be removed at this time to reduce the rate of silting in the pond.

4.10 Where other new areas of habitat are to be created, consideration should be given to the seeding of these areas using appropriate seed mixes. Where possible these seeds should be locally sourced to support the genetic integrity of local wild plant populations. Where new trees or shrubs are to be planted, native tree and shrub species should be used as these are most beneficial to invertebrates, and many also produce seeds, nuts and berries that are food for native mammals and birds. Planting of non-native plant species should be limited to those that are not invasive and should prioritise those that provide a good source of nectar for invertebrates e.g. Butterfly-bush, Jasmine.

Protected and Notable Species

Bats

- 4.11 The site provides bat foraging habitat along the northwest boundary hedge and around trees. A new opening will be created in the northwest boundary vegetation. This hedgerow is unlikely to be used by commuting bats as it is poorly connected into the wider area and is close-cropped. In this instance no further surveys for bat activity are deemed necessary.
- 4.12 The trees on site did not have any potential for roosting bats. In the event that works are required to remove trees, overhanging branches or undertaking tree surgery works, the following procedures should be employed in the unlikely event a bat or bats are discovered:
 - If the roost is still on the tree and bats are not injured, seek advice from a licensed ecologist. If help is not available, allow bats to fly out of harm's way.
 - If the timber is felled, the roost is not exposed and the bats are not injured, temporarily seal and isolate the roost and seek advice from a licensed ecologist. If advice is not readily available, position the roost off the ground, re-open it and allow bats to relocate of their own accord.
 - If the roost has been exposed, and especially if bats have been injured, collect bats in a secure box or bag (using a glove) and contact a licensed ecologist.
 - Note the date, locality, type of tree, situation in tree and bat species if known.
- 4.13 An appropriate lighting strategy should be put in place to ensure that any impacts, both during construction and residual impacts, are minimised or avoided altogether. Measures include the use of low UV lights such as warm white LED lamps with a wavelength of 590 nm for external lighting using column lighting with full cut-off directional shielding to ensure that lighting is directed only where required and light spill into adjacent areas is minimised.
- 4.14 The proposed development provides an opportunity to significantly enhance the site for roosting bats and the local planning authority will usually expect enhancements included within proposals. The provision of large open roof spaces for species such as long-eared bats is unlikely to be desirable or worthwhile in this location, but there are many ways in which the buildings could be enhanced for crevice-dwelling species, which readily inhabit urban areas, without

inconveniencing prospective occupants. Bat panels such as Schwegler Bat Access Panel 1FE, or bat tubes such as the Schwegler 1FR Bat Tube can be incorporated into the building exteriors, or roosts such as the Schwegler Bat Roost 1FQ can be erected after building completion.

Badgers and other mammals

4.15 The potential for Badgers and other species of protected or notable mammal species to use the site is deemed to be low. No constraints are predicted as a result of the presence of small mammals and passing Badgers, but as a precaution it is recommended that during the construction phase of the project any trenches and other excavations are back-filled before nightfall or a ramp left to allow animals to easily exit, and any open pipes larger than 150 mm should be capped off overnight.

Birds

- 4.16 There was no evidence of current nesting by birds; however, disused nesting material was noted within the upper branches of an oak tree and other nests may have been missed in denser vegetation. It is likely birds will nest within the vegetation in the future.
- 4.17 All nesting birds are protected under The Wildlife and Countryside Act 1981 (and amendments). No further surveys are recommended at this time but as a precaution it is recommended that any vegetation removal and initial site clearance works be carried out outside of the bird-nesting season of March to August for the vegetation. Where this is not possible the vegetation would need to be surveyed for nesting birds by a suitably qualified ecologist prior to works commencing. If they are found, then the nest and surrounding habitat must remain intact until the young have fledged.
- 4.18 The new buildings provide a good opportunity to enhance the site for other species of birds. Bird boxes for small birds, such as Blue Tits, could be erected on the buildings; these should be fixed at a minimum of 2 m from the ground, with the entrance hole between north and east to avoid the worst of the weather and prevent the box and its inhabitants becoming overheated in sunny weather.
- 4.19 In order to compensate for any loss of foraging habitat and/or enhance the site, it is recommended that any new planting concentrate on species that are native to the area and ideally produce a range of seeds and berries at varying times of the year. Nectar rich plants could also be used encourage invertebrates on to the site, which in turn provide food for birds as well as other species such as bats.

5.0 References

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APPENDIX 5 Sketch Layout



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