

## Appendix E – 776 Land off Bedford Road, Roxton

1. This is a *deliverable* site in a sustainable and accessible location, with potential for 50 new homes, adjoining a draft strategic employment allocation (Policy EMP8 Land at Roxton, south west of the Black Cat roundabout) and adopted LP2030 allocation for new homes under Policy 27 – Land north of School Lane, Roxton. The ability to co-locate new homes with strategic employment is a significant advantage in sustainability terms. Combined with the availability of existing services and facilities this provides the real opportunity to support self-containment and reduce the need to travel by car.
2. The site's sustainability and accessibility credentials are identified in the Council's SA of the site, summarised at **Appendix E(i)** of these representations. The site is in close proximity to a food store, primary school and major employment – all of which scores positively in the Council's assessment. Proximity to the food store and primary school in particular are scored as 'Major positives'.
3. The site is close to existing bus services, with service 905 providing frequent services into Bedford, with less than a 30-minute journey time.
4. The SA demonstrates that access can be achieved without constraints. With respect to the 'uncertain' impacts on highway capacity identified in the SA, this is clearly a scale of development where impacts will be limited and no capacity issues are identified at nearby junctions (refer to the Transport Technical Note enclosed at **Appendix E(ii)**). Even if issues were encountered the modest scale of development on this non-strategic site would be capable of localised mitigation through the S106/S278 process as required.
5. In terms of ecology, the Ecology Topic Paper at **Appendix E(iii)** (EDP, July 2022) sets out that surveys are currently underway to identify the presence/absence of protected species, the results of which can be discussed further with the Council once received, but no significant constraints are expected at this stage given the ability to provide habitats and mitigation as part of the masterplan. In any event, the enclosed Biodiversity Net Gain calculation demonstrates how net gains can be realised. This helps to resolve the SA's 'uncertain' impacts under objectives 2b (protected species) and 2c (achieving a net gain). It is also important to note the wider context whereby the Council's preferred strategic site allocations score negative impacts in the SA – including sites HOU11, HOU13, HOU15 and HOU16 for example (refer **Appendix E(i)**).

6. With respect to heritage it is important to note that the SA shows that all of the Council's favoured strategic allocations (HOU11, HOU13, HOU14, HOU15, HOU16 & HOU19) score negative against this SA objective (4a) as demonstrated in **Appendix E(i)**. Nevertheless, the conclusions of the Council's heritage assessment for site 776 have been considered and are addressed in the topic paper enclosed at **Appendix E(iv)** (EDP, July 2022). This addresses proximity to 14 High Street (Grade II Listed C18th thatched cottage) and Roxton Conservation Area, which, fundamentally can be addressed via the site's masterplanning.
7. With respect for the potential impacts on non-designated assets and archaeology, the enclosed assessment considers that there is medium potential for remains from prehistoric and roman period but it is unlikely that would be of such significance as to warrant preservation *in situ* given the context on adjoining development sites (including the LP2030 allocation under Policy 27).
8. A draft masterplan is enclosed at **Appendix E(v)** to illustrate how a well-planned community can be realised, informed by the above technical work, in particular sensitivity to the Grade II listed building and Conservation Area. Rainier Developments is keen to work with the Council, Members, local community and key stakeholders to realise the opportunities and benefits associated with this deliverable site.

## **Appendix Ei Sustainability Appraisal Scoring Comparison**

|   | KSC & RSC options | Draft Strategic Site Allocations |   |                                       |                                      | New Settlements (not assessed against same sub-criteria)      |  |
|---|-------------------|----------------------------------|---|---------------------------------------|--------------------------------------|---|--|
|   | 776 (Roxton)      | HOU11 (3245)                     | HOU13 (1333 & 636)<br>Kempston Rural, Land at<br>Gibraltar Corner | HOU15 (1004)<br>Land South of Wixhams | HOU16 (3233)<br>Land East of Wixhams | HOU14 (0004)<br>Land at Kempston Hardwick -<br>New Settlement | HOU19 (907)<br>Little Barford - New Settlement |
| 1a. Within or adjoining AUB SPA or built form of a small settlement   | ?                 | x                                | ?   | ?                                     | x                                    |   |  |
| 1b. Accessible on foot to a food store  | ++                | x                                | +   | ++                                    | ++                                   |   |  |
| 1c. Accessible on foot to a primary school  | ++                | x                                | +   | ++                                    | ++                                   | x   | x  |
| 1d. Accessible on foot or by bus to a major employer  | +                 | +                                | +   | x                                     | x                                    |   |  |
| 1e. Outside, adjoining or within the air quality management area  | +                 | +                                | +   | +                                     | +                                    |   |  |
| 2a. Within or adjoining site of nature conservation importance  | +                 | x                                | +   | +                                     | +                                    |   |  |
| 2b. In an area where protected species are known or likely to exist   | ?                 | xx                               | xx  | xx                                    | x                                    |   |  |
| 2c. Potentially able to achieve a net gain in biodiversity  | ?                 | ?                                | ?   | ?                                     | ?                                    | ?   | ?  |
| 2d. Able to link into the green infrastructure opportunity network  | 0                 | +                                | +   | +                                     | +                                    |   |  |
| 3a. Proposing a new renewable energy scheme or extra energy efficiency standards                                  | 0                 | 0                                | 0   | 0                                     | +                                    |   |  |
| 3b. Within or adjoining the urban area, a defined settlement policy area or the built form of a small settlement  | ?                 | x                                | ?   | ?                                     | x                                    |   |  |
| 3c. Accessible on foot to a food store  | ++                | x                                | +   | ++                                    | ++                                   | x   | x  |
| 3d. Accessible on foot to a primary school  | ++                | x                                | +   | ++                                    | ++                                   |   |  |
| 3e. Accessible on foot or by bus to a major employer  | +                 | +                                | +   | x                                     | x                                    |   |  |
| 4a. Likely to impact on designated or nondesignated heritage assets or their settings                             | x                 | x                                | x   | x                                     | x                                    | x   | x  |
| 5a. Likely to increase future economic and employment opportunities   | 0                 | +                                | 0   | 0                                     | +                                    | ++  | +  |
| 6a. Proposing a main town centre use in, on the edge or outside of a town centre                                  | 0                 | 0                                | 0   | 0                                     | +                                    | ?   | ?  |
| 7a. Within 400m of an existing open space or proposing open space within it                                       | +                 | x                                | +   | x                                     | +                                    |   |  |
| 7b. Within 800m of a sports facility or proposing a sports facility within it                                     | x                 | +                                | x   | x                                     | +                                    | +   | +  |
| 8a. Likely to have a significant adverse impact on the surrounding landscape                                      | 0                 | ?                                | ?   | ?                                     | 0                                    |   |  |
| 8b. Within the existing settlement built form   | +                 | x                                | +   | +                                     | x                                    |   |  |
| 9a. On previously developed land  | x                 | x                                | x   | x                                     | x                                    |   |  |
| 9b. On best and most versatile agricultural land ie grades 1, 2 or 3a   | x                 | x                                | ?   | ?                                     | x                                    | +   | x  |
| 10a. Within a groundwater source protection zone  | +                 | +                                | +   | +                                     | +                                    | +   | +  |
| 11a. At risk of flooding  | +                 | ?                                | +   | +                                     | ?                                    | ?   | ?  |
| 12a. Likely to provide a mix of housing, including affordable housing   | +                 | +                                | +   | +                                     | +                                    |   |  |
| 12b. Able to address a particular housing need  | x                 | x                                | +   | +                                     | +                                    | +   | +  |
| 13a. Within 800m of a facility where cultural or social activities can be accessed                                | +                 | x                                | +   | +                                     | +                                    |   |  |
| 14a. Likely to encourage social cohesion  | 0                 | +                                | +   | 0                                     | +                                    | +   | +  |
| 14b. Likely to help make the area safer   | +                 | +                                | +   | +                                     | +                                    |   |  |
| 15a. Within or adjoining the urban area, a defined settlement policy area or the built form of a small settlement | ?                 | x                                | ?   | ?                                     | x                                    |   |  |
| 15b. Accessible on foot to a food store   | ++                | x                                | +   | ++                                    | ++                                   |   |  |
| 15c. Accessible on foot to a primary school   | ++                | x                                | +   | ++                                    | ++                                   |   |  |
| 15d. Accessible on foot or by bus to a major employer   | +                 | +                                | +   | x                                     | x                                    | x   | x  |
| 15e. Connect highway without constraint   | +                 | +                                | +   | ?                                     | ?                                    |   |  |
| 15f. Highway or junction capacity issues  | ?                 | +                                | ?   | ?                                     | x                                    |   |  |

**Key**

0

?

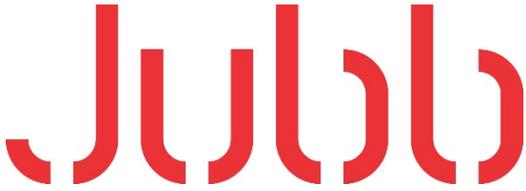
+

++

x

xx

## **Appendix Eii Transport Technical Note**



Title: Technical Note 01– Review of Bedford  
Local Plan 2040 Transport Evidence –  
Roxton (Site 776)

Date: July 2022

Prepared by: AMW

## 1.0 Introduction

- 1.1 Jubb have been appointed by Rainier Developments Ltd (Rainier) to undertake a review of the transport evidence supporting the draft Bedford Local Plan 2040.
- 1.2 Rainier have submitted representations for residential development at Roxton (Site 776).

## 2.0 Preferred Option

- 2.1 The Plan has focussed on the delivery of new settlements located within the proposed future East West Rail corridor.
- 2.2 The East West Rail route between Bedford and Cambridge is at an early planning stage with no agreed preferred route or location for the new rail station at St Neots currently identified and with no funding established for its delivery. This is a **fundamental flaw** in the assessment of the delivery of the preferred option for the delivery of the draft Local Plan proposals.
- 2.3 The new settlements are reliant on the delivery of **large-scale highway infrastructure** to ensure their traffic generation can be accommodated without detriment to the highway network. Whilst for the Bedford highway network, schemes have been identified, the ability to deliver, and the viability of the schemes has not been progressed in any detail. **No schemes have been identified** for the Strategic Road Network and therefore, the ability to mitigate the effects of the preferred strategy is not known. This lack of detail gives rise to concerns in respect of the **soundness** and **justification** of the whole strategy.
- 2.4 The modelling recognises that for the proposed settlements, due to the large distances to the existing urban areas, **active travel will be prohibitive**. This statement brings into question the ability of the strategy to deliver sustainable development.
- 2.5 The location of the proposed settlements and their proximity to the proposed new rail station cannot be determined at this stage as the siting of the new station has not been determined. Therefore, at this stage, the sustainability of the preferred option **cannot be considered to be reliable**.

## 3.0 Modelling Scenarios

- 3.1 Modelling of four development scenarios was undertaken utilising the Bedford Borough Transport Model (BBTM) to inform the transport impacts:
  - Grey – dispersed growth uniformly scaling all sites identified as part of the Local Plan 2040 call for sites;
  - Pink, Yellow & Brown – infrastructure focused growth along the A421 corridor and the proposed East West rail corridor
  - Red & Orange – new settlement focussed growth; and
  - Brown – Urban focused growth

- 3.2 The modelling of the four scenarios is **not consistent** with each scenario delivering differing levels of housing (between 12,000 and 15,500) and jobs (between 11,000 and 16,500). These significant differences mean that the assessments of development scenarios are **not equivalent** as traffic generation of an additional 3,500 dwellings and/or an additional 5,500 jobs would be significant and therefore, the impact on the highway network would be **not comparable**.
- 3.3 The 'Grey' scenario is an **unformed and flawed** approach to the assessment of the delivery of dispersed growth. By uniformly scaling all sites it does not consider the viability of each site when delivering a reduced number of residential units, it does not review each site's location in terms of delivering sustainable development and it does not consider an approach where several smaller development sites in Key Service Centres could improve the existing sustainability to the benefit of the existing community.
- 3.4 Whilst not important in terms of assessment of the 2040 Local Plan, the 'Grey' scenario does not include any growth to 2050 whilst all other scenarios provide growth. Given that the call for sites the Council received submissions proposing in excess of 70,000 dwellings and 603 hectares of employment as a primary use, the reasons for not including growth during this time period have not been explained.
- 3.5 The majority of the identified mitigation schemes for the 2040 Local Plan growth are expected to open in 2040 or even, in the case of the proposed Dennybrook and Little Barton development after 2040. These schemes, which are not committed and, have **not been fully assessed** in terms of deliverability with available highway land, achieving design standards or fully costed, will not offer a resolution to the expected growth until the end of the 2040 plan period resulting in congestion.
- 3.6 All identified mitigation measures for the 'Grey' scenario have been utilised for the assessment. It is unclear whether these large schemes are beneficial in terms of mitigating the impact of dispersed development. The assessment **does not identify local mitigation** that could alter the results of some of the metrics utilised within the RAG assessment (e.g. localised transport schemes could reduce the 'red' assessment for rerouting onto less appropriate roads in the AM and PM peak hours and delays/volume capacity in the PM peak hours. Uniformly scaling all of the sites received from the call for sites has resulted in a scatter gun approach that does not consider the benefits of locating dispersed growth using a hierarchical approach set by accessibility to services and facilities and public transport provision along with local mitigation i.e. smaller junction improvements to increase capacity and prevent vehicles using alternative less appropriate roads and increased public transport frequency or routeing.

### Summary

- 3.7 The quantum of development differs over the four scenarios and therefore, the assessment is not comparable.
- 3.8 The 'Grey' scenario does not consider the accessibility of the sites received from the call for sites. The assessment has been undertaken in a manner that does not represent the scenario in the best light and therefore, the soundness of this scenario is questioned. Detailed filtering of the sites included in the 'Grey' scenario should be undertaken to ensure the highest accessible sites are included in the scenario assessment.
- 3.9 The deliverability and viability of the identified mitigation measures has not been considered raising concerns over the soundness of the ability to provide the schemes. Localised mitigation measures for the 'Grey' scenario have not been considered; the identification of more localised measures could have an effect on the RAG assessment findings and again questions the soundness of the modelling and its findings.

## 4.0 Results of the Modelling

- 4.1 The 2030 Reference Case modelling, which includes the adopted Local Plan 2030 growth and identified infrastructure schemes indicates that the anticipated traffic flows will be approaching or exceeding the capacity of the road network. These include junctions along the A421 to the south of Bedford and along Clapham Road in northern Bedford town with **no identified improvement schemes** and in the case of the A421 Highways England are **only monitoring**.
- 4.2 The RAG assessment states for the preferred 'Red & Orange' scenario:

AM Peak Hour – “The ‘with mitigation’ scenario of this option produces the same RAG assessment as ‘Grey’ ‘with mitigation’. The ‘without mitigation’ scenario is also similar to ‘Grey’ ‘without mitigation’ with identical ratings for all metrics except for the cross boundary impacts.”

PM Peak Hour – “The ‘with mitigation’ scenario is very similar to ‘Grey’ ‘with mitigation’ varying only for the forecast volume-capacity ratios at key junctions and impacts on the AQMA. The mitigation measures only improve forecasts for average network speeds and forecast volume-capacity ratios with all other metrics forecast to stay the same or worsen with the inclusion of mitigation measures”

- 4.3 Despite these statements indicating that the performance of the ‘Red & Orange’ and ‘Grey’ scenarios are similar in finding, only the ‘Red & Orange’ scenario was taken forward for further assessment including additional mitigation with” Implementing *bus provision or active mode measures with a dispersed growth scenario* (‘Grey’) would be impractical due to the dispersed nature of growth assumed in this scenario”.
- 4.4 Whilst this statement can be agreed for the ‘Grey’ scenario as modelled, this statement does not hold ground for a ‘Grey’ scenario where sites are **filtered on sustainability and accessibility** and where this may provide a ‘Grey’ scenario where development is able to **support and enhance existing bus services**.
- 4.5 Additionally, in relation to the ‘Red & Orange’ scenario it is stated “the larger distances between these proposed settlements and existing urban areas would likely be **prohibitive to the development of active mode measures** to significantly reduce car usage”. Many of the ‘Grey’ scenario sites are located on urban fringes in proximity of existing services and facilities and given the opportunity to be filtered for accessibility would provide an opportunity to **improve existing active travel infrastructure** and decrease car usage.
- 4.6 The results of the further assessment of the ‘Red & Orange’ scenario indicates that extensive highway infrastructure will be required to mitigate the impact of the new settlements. The **ability to deliver** these schemes on the ground has not been considered in detail and their impact on the **viability** of the developments is not considered.
- 4.7 Critically, mitigation for the related impacts of the ‘Red & orange’ scenario on the Strategic Highway Network **has not been identified** with Highways England stating within a Memorandum of Understanding “*The parties will continue to work together to assess specific impacts in more detail and agree the outcomes of the modelling, which will confirm the package of interventions to be included in the IDP required to support delivery of the plan.*”

## Summary

- 4.8 The **crude** assessment of the ‘Grey’ scenario **performs similarly** to the preferred ‘Red & Orange’ scenario. As identified earlier the ‘Grey’ scenario assessment should be undertaken with **filtering of sites** using accessibility thresholds and identified local mitigation schemes to enable a **realistic comparison exercise** of these similarly performing scenarios to be undertaken.
- 4.9 The delivery of the identified mitigation for the ‘Red & Orange’ scenario has not been assessed in terms of **deliverability** and **viability** and **necessary mitigation for the Strategic Road Network has not been identified** calling into the **soundness of the Council’s preferred option** for development post 2030.

## 5.0 Roxton Site 776

- 5.1 This section undertakes a review of the Rainier site at Roxton for which representations to the Local Plan call for sites has been submitted.
- 5.2 The site is identified to deliver a reduced quantum of approximately 50 residential units.
- 5.3 As identified in the BSAPF reports, suitable access can be provided.

- 5.4 The BSAPF reports that there are potential capacity issues. Googlemaps is not showing congestion at the Bedford Road / High Street junction. Googlemaps indicates that there may be congestion for traffic exiting/entering to/from the east at the Bedford Road / Park Road junction during the peak hours; however, given the location of the proposed development it would be expected for vehicles travelling to/from the east that access onto Bedford Road is taken from the High Street junction. Googlemaps indicates that there is congestion during the peak hours at the Bedford Road / A1 / A421 roundabout junction known as the Black Cat junction. A preliminary assessment has been undertaken indicating that 50 dwellings are likely to generate 39 and 31 two-way vehicle trips in the AM and PM peak hours respectively. Of these vehicle trips 18.5% are expected to travel to/from the Bedford Road / A1 / A421 roundabout which amounts to a maximum of an additional 7 two-way vehicle trips passing through the junction. This level of increase is not significant and will not have a 'severe' impact on the operation of the junction. No mitigation scheme was identified for this junction within the modelling exercise.
- 5.5 The Council's Sustainability Appraisal scored the site positively for criteria 1b, 1c, 1d and 15b - 15e. Jubb's analysis aligns with the findings and the appraisal shows that the site sites are in a sustainable and accessible location.
- 5.6 There are existing footways that serve the site and National Cycle Route 12 borders the site enabling direct access to the additional services and facilities available in Great Barford.
- 5.7 Bus stops, served by frequent bus services, are available within a 250 – 500m walk of the site. The 905 service provides a 30-minute frequency to Bedford (20 minutes) and St Neots (12 minutes) providing access to the shops, services and employment found in the centres and access to Bedford and bus station enabling onward travel by sustainable modes. The 905 to St Neots provides onwards connection to Cambridge (additional 60 minutes). The proposed development will add patronage and increase viability of the existing bus services.
- 5.8 There are a range of services and facilities within a reasonable 2km walking distance of the site including a post office and a primary school.
- 5.9 The site is **sustainably located** with access to a range of everyday services and facilities with **suitable infrastructure** to enable journeys to be undertaken by means other than the private car. The proposed development would not have a detrimental effect on the operation of the local highway.

### Summary

- 5.10 The assessment of the site at Roxton that has been submitted for consideration has shown that the site is sustainably located with the ability to undertake journeys by modes other than the private car. The development is compliant with the requirements for new development set out in the National Planning Policy Framework.

## 6.0 Summary

- 6.1 This assessment of the transport evidence to support the Local Plan transport evidence has highlighted issues in respect of comparativeness, site selection and the deliverability and viability of identified mitigation for the four scenarios tested.
- 6.2 Of particular concern is the 'Grey' scenario where development has been uniformly scaled using all of the sites received in the call for sites rather than assessing the sites based on accessibility. A more detailed and well thought out assessment of the 'Grey' scenario is required to be undertaken.
- 6.3 The assessment has shown shortfalls in the transport work undertaken to date to support the Local Plan 2040 and this raises concerns regarding the soundness and justification of the whole strategy.
- 6.4 Due to the uncertainty in respect of the alignment of the East West rail route and the siting of new railway stations, along with the recognition that the new settlements will be prohibitive to active travel modal shift, the sustainability of, and therefore compliance with the National Planning Policy Framework, of the preferred strategy is brought into question.

- 6.5 The identified highways infrastructure required to support the new settlement preferred option is uncertain in terms of deliverability and viability. The site at Roxton is sustainably located and able to provide the undertaking of journeys by means other than the private car. The site does not require significant transport infrastructure improvements and can provide additional patronage to existing services and facilities.
- 6.6 Therefore, due to the unreliability of the transport evidence, the Local Plan 2040 should consider the allocation of sustainably located smaller development to ensure the required housing supply can be met.

## **Appendix Eiii Ecology Technical Note**

## Land off Bedford Road, Roxton Ecology Technical Note edp6100\_r007

### 1. Introduction

1.1 The following technical note outlines how the Land off Bedford Road, Roxton, Site ID776 (hereafter referred to as the 'Site') will meet the site-specific ecology objectives set out in Bedford Borough Council's Sustainability Appraisal Report (April 2022) at Appendix 11. The location of the Site is shown in **Appendix EDP 1**. The objectives are:

- **“2a. Within or adjoining a site of nature conservation importance**  
*The site is not within or adjoining a site of nature conservation importance*
- **2b. In an area where protected species are known or likely to exist?**  
*Uncertain or insufficient information*
- **2c. Potentially able to achieve a net gain in biodiversity?**  
*Uncertain or insufficient information*
- **2d. Able to link into the green infrastructure opportunity network?**  
*The site is not within or adjoining the green infrastructure opportunity network or the impact of the proposal is neutral”*

1.2 This Technical Note therefore addresses the conclusions of:

- **2b.** – providing the latest information regarding protected species, how the masterplan has responded, demonstrating no adverse impacts and the clear potential to realise biodiversity net gains; and
- **2c.** – providing information to demonstrate that biodiversity net gain is a deliverable and realistic prospect.

1.3 It demonstrates how ecology is not an overriding constraint or reason to exclude the Site from further consideration as part of the site selection and Sustainability Appraisal process.

1.4 In addition to the above objectives, objective **2e.** states:

- **“2e. Likely to impact on an area currently providing ecosystem services.**  
*Opportunity area for 3 or more ecosystem services covers less than 25% of the site.”*

1.5 Ecosystem services relate to water flow, air quality, and noise matters which have been addressed separately in the main representations. Therefore, they are not considered further within this note.

## **2. Objectives**

### ***Objective 2b***

2.1 A preliminary ecological appraisal was undertaken in January 2020 and is appended to this technical note. The appraisal found that the Site contains suitable habitats to support:

- Birds;
- Bats (roosting and activity);
- Badgers;
- Great Crested Newts; and
- Reptiles.

2.2 The following suite of surveys are currently being undertaken to confirm presence/likely absence of these species:

- Pilot breeding bird survey;
- Bat suitability assessment of buildings and trees;
- Bat emergence surveys;
- Bat activity survey, including manual transect and automated detector;
- Badger walkover survey;
- Great crested newt eDNA survey; and
- Reptile surveys.

2.3 Full findings from the surveys will be provided within an ecological appraisal report that will be submitted as part of the planning application for the Site.

2.4 It is not considered that if any of these species were to be present, they would provide an in-principle constraint to development. Any potential impacts upon these species can be

mitigated for within the generous amount of open space being provided within the proposals for the Site.

### **Objective 2c**

- 2.5 The development proposals have been subject to a Biodiversity Net Gain assessment using the Defra Biodiversity Metric 3.1<sup>1</sup>, released May 2022.
- 2.6 The proposed masterplan for the Site, included as **Appendix EDP 1**, achieves a Biodiversity Net Gain of +0.35 units (+1.48%) in line with local planning policy. The full calculator is provided as **Appendix EDP 2**.
- 2.7 The existing habitats for the Site are shown on **Plan EDP 1** and the proposed habitats on **Plan EDP 2**. Full condition assessments for the existing habitats that are present within the Site are provided in **Appendix EDP 3**.
- 2.8 The masterplan, though illustrative at this stage, demonstrates that the Site is capable of providing a net gain to biodiversity. The calculator doesn't account for biodiversity enhancements such as bird and bat boxes, insect hotels, amphibian and reptile hibernaculum and hedgehog highways. These will provide further gains for biodiversity.

## **3. Conclusions**

- 3.1 The Site is able to make provisions for protected species and is capable of providing a net gain to biodiversity therefore it is able meet Objectives **2b** and **2c** of the Sustainability Appraisal.

---

<sup>1</sup> <http://publications.naturalengland.org.uk/publication/6049804846366720>



---

**Appendix EDP 1**  
**Concept Masterplan**  
**Urban Design Box RAN104-3204**



- Site Boundary
- Proposed all modes access point
- Proposed pedestrian access
- Existing Public Right of Way
- Existing National Cycle Route
- New walking route
- Main street
- Pavement and private drive
- Development parcels and indicative frontage

- Public Open Space
- Structural Open Space
- Existing trees retained
- Existing hedgerows retained
- Proposed new trees
- Proposed new hedges
- Potential attenuation area (subject to drainage design)
- Potential play area + 20m offset
- Potential combined pumping station + 15m offset

**Schedule of Concept Masterplan Areas:**

|   |                         |
|---|-------------------------|
| Site area (both parcels):                                     | 4.39ha                  |
| <b>Residential Development:</b><br>(48 homes @ average 30dph) | <b>1.59ha</b>           |
| <b>Public Open Space:</b><br>(including SUDS)                 | <b>2.73ha</b><br>0.12ha |



**DRAFT**

client:  
**Rainier Developments Limited**

project:  
**Land off Bedford Road, Roxton**

drawing title:  
**Concept Masterplan**

urbandesignbox.co.uk

job number:  
**RAN104**

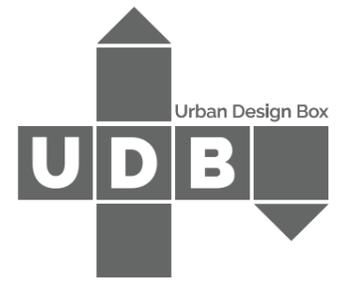
scale:  
**1:1250 @ A3**

date:  
**July 2022**

drawing number:  
**3204**

drawn:  
**AJ**

status:  
**Preliminary**



Copyright of Urban Design Box. This drawing is for illustrative purposes only and should not be used for any construction or estimation purposes. No liability or responsibility is accepted arising from reliance upon the information contained within this drawing. DO NOT SCALE DRAWINGS.



---

**Appendix EDP 2**  
**Biodiversity Net Gain Calculations**

Headline Results

[Return to results menu](#)

|                  |                       |       |
|------------------|-----------------------|-------|
| On-site baseline | <i>Habitat units</i>  | 23.82 |
|                  | <i>Hedgerow units</i> | 0.00  |
|                  | <i>River units</i>    | 0.00  |

|   |                       |       |
|---|-----------------------|-------|
| On-site post-intervention<br><small>(Including habitat retention, creation &amp; enhancement)</small> | <i>Habitat units</i>  | 24.17 |
|   | <i>Hedgerow units</i> | 0.00  |
|   | <i>River units</i>    | 0.00  |

|  |                       |       |
|--|-----------------------|-------|
| On-site net % change<br><small>(Including habitat retention, creation &amp; enhancement)</small> | <i>Habitat units</i>  | 1.48% |
|  | <i>Hedgerow units</i> | 0.00% |
|  | <i>River units</i>    | 0.00% |

|                   |                       |      |
|-------------------|-----------------------|------|
| Off-site baseline | <i>Habitat units</i>  | 0.00 |
|                   | <i>Hedgerow units</i> | 0.00 |
|                   | <i>River units</i>    | 0.00 |

|  |                       |      |
|--|-----------------------|------|
| Off-site post-intervention<br><small>(Including habitat retention, creation &amp; enhancement)</small> | <i>Habitat units</i>  | 0.00 |
|  | <i>Hedgerow units</i> | 0.00 |
|  | <i>River units</i>    | 0.00 |

|  |                       |      |
|--|-----------------------|------|
| Total net unit change<br><small>(including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small> | <i>Habitat units</i>  | 0.35 |
|  | <i>Hedgerow units</i> | 0.00 |
|  | <i>River units</i>    | 0.00 |

|   |                       |       |
|---|-----------------------|-------|
| Total on-site net % change plus off-site surplus<br><small>(including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small> | <i>Habitat units</i>  | 1.48% |
|   | <i>Hedgerow units</i> | 0.00% |
|   | <i>River units</i>    | 0.00% |

|                          |  |
|--------------------------|--|
| Trading rules Satisfied? | No - <a href="#">Check Trading Summary</a> ▲ |
|--------------------------|--|







**Appendix EDP 3**  
**Biodiversity Net Gain- Habitat Condition Assessments**

A3.1 The habitat condition assessments for the existing habitats are provided in **Tables EDP A3.1 to A3.4.**

**Table EDP A3.1:** Modified Grassland Habitat Condition Assessment

| Grassland- Modified Grassland    |   | Condition Achieved (Y/N) |             |
|----------------------------------|---|--------------------------|-------------|
|                                  |   | Fields                   | Footpath    |
| 1                                | "There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a medium distinctiveness grassland habitat type.<br>NB - this criterion is essential for achieving moderate condition."                       | Y                        | N           |
| 2                                | Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.                                      | N                        | N           |
| 3                                | Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.          | Y                        | Y           |
| 4                                | Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities. | Y                        | N           |
| 5                                | Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).   | Y                        | N           |
| 6                                | Cover of bracken less than 20%.   | Y                        | Y           |
| 7                                | There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).  | Y                        | Y           |
| <b>Number of criteria passed</b> |   | <b>6</b>                 | <b>3</b>    |
| <b>Condition</b>                 |   | <b>Good</b>              | <b>Poor</b> |

**Table EDP A3.2:** Traditional Orchard Habitat Condition Assessment

| Grassland- Traditional Orchard |   | Condition Achieved (Y/N) |
|--------------------------------|---|--------------------------|
| 1                              | "Presence of ancient and / or veteran trees.<br>NB - this criterion is essential for achieving good condition."   | N                        |
| 2                              | Less than 5% of fruit trees are smothered by scrub. Small patches of dense scrub and/or scattered scrub growing between trees can be beneficial to biodiversity, however these should occupy less than 10% of ground cover. | Y                        |
| 3                              | There is evidence of formative and/or restorative pruning to maintain longevity of trees.   | N                        |

| <b>Grassland- Traditional Orchard</b> |  | <b>Condition Achieved (Y/N)</b> |
|---------------------------------------|--|---------------------------------|
| 4                                     | Presence of standing and/or fallen dead wood: all mature trees have standing or fallen branches, stems and stumps greater than 10 cm diameter associated with them.                            | N                               |
| 5                                     | At least 95% of the trees are free from damage caused by humans or animals e.g. browsing, bark stripping or rubbing on non-adjusted ties.  | Y                               |
| 6                                     | Sward height is varied (between 5 cm and 30 cm) and small patches of bare ground are present creating structural diversity. Up to 10% cover of patches of tall herb vegetation may be present. | Y                               |
| 7                                     | Species richness of the grassland is equivalent to a medium, high, or very high distinctiveness grassland.   | N                               |
| 8                                     | There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species of sub-optimal condition make up less than 10% of ground cover.                          | N                               |
| <b>Number of criteria passed</b>      |  | <b>3</b>                        |
| <b>Condition</b>                      |  | <b>Poor</b>                     |

**Table EDP A3.3:** Ponds Habitat Condition Assessment

| <b>Lakes- Ponds (Non-Priority Habitat)</b> |   | <b>Condition Achieved (Y/N)</b> |             |
|--|---|---------------------------------|-------------|
|  |   | <b>P1</b>                       | <b>P2</b>   |
| 1  | The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock. | Y                               | Y           |
| 2  | There is semi-natural habitat (i.e. moderate distinctiveness or above) for at least 10 m from the pond edge.  | Y                               | N           |
| 3  | Less than 10% of the pond is covered with duckweed or filamentous algae.  | N                               | N           |
| 4  | The pond is not artificially connected to other waterbodies, either via streams, ditches or artificial pipework.  | Y                               | Y           |
| 5  | Pond water levels should be able to fluctuate naturally throughout the year. No obvious dams, pumps or pipework.  | Y                               | Y           |
| 6  | There is an absence of non-native plant and animal species.   | Y                               | Y           |
| 7  | The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.                                     | Y                               | Y           |
| 8  | In non-woodland ponds, plants, be they emergent, submerged or floating (excluding duckweeds), should cover at least 50% of the pond area that is less than 3 m deep.      | N                               | N           |
| 9  | The surface of non-woodland ponds is no more than 50% shaded by woody bankside species.   | N                               | N           |
| <b>Number of criteria passed</b>           |   | <b>6</b>                        | <b>5</b>    |
| <b>Condition</b>                           |   | <b>Moderate</b>                 | <b>Poor</b> |

**Table EDP A3.4:** Ruderal/Ephemeral Habitat Condition Assessment

| <b>Sparsely Vegetated Land – Ruderal/Ephemeral</b> |   | <b>Condition Achieved (Y/N)</b> |
|--|---|---------------------------------|
| 1  | The appearance and composition of the vegetation closely matches characteristics of the specific sparsely vegetated habitat type (see UKHab definition linked above). Indicator species for the specific sparsely vegetated habitat type are very clearly and easily visible. | N                               |
| 2  | Cover of bracken, scrub and trees less than 25%.  | Y                               |
| 3  | There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition <sup>1</sup> make up less than 5% of vegetated ground cover.  | N                               |
| 4  | Vegetation cover of vascular and non-vascular plants between 5 and 50%.   | Y                               |
| <b>Number of criteria passed</b>                   |   | <b>2</b>                        |
| <b>Condition</b>                                   |   | <b>Poor</b>                     |

## **Appendix Eiv Heritage Technical Note**

## **Land Off Bedford Road, Roxton (Site 776)**

### **Commentary on Bedford Borough Council's Sustainability Appraisal**

#### **edp6100\_r006a**

#### **1. Introduction**

- 1.1 The following Statement on archaeology and heritage matters has been prepared by The Environmental Dimension Partnership Ltd (EDP), on behalf of Rainier Developments Limited, who are promoting a parcel of land within the emerging Bedford Borough Council's Local Plan (2040). This promotional site is known as Land off Bedford Road, Roxton (Site ID: 776), which is divided into Parcel A (to the north) and Parcel B (to the south). When not specifically referring to one or other of these parcels, the promotional site will hereafter be referred to as 'the Site'.
- 1.2 This statement focusses on the Council's conclusions regarding the suitability of the site for inclusion within the Local Plan (2040), as presented as part of their wider Sustainability Appraisal (SA). Specifically, this is in terms of the Council's findings regarding the likely effect that the allocation of the Site would have on both designated and non-designated heritage assets, to address SA objective 4a. This objective requires consideration of whether or not the site is "[l]ikely to impact on designated or non-designated heritage assets or their settings".
- 1.3 The following Statement will briefly provide an overview of the Council's findings and then provide a discussion, based on detailed research of the Site augmented by a Site walkover, to provide evidence for why the Site is entirely suitable (in terms of archaeology and heritage) for inclusion in the Local Plan. These sections are divided between designated and non-designated heritage assets.

#### **2. Designated Heritage Assets**

- 2.1 The detail of the Council's assessment for the Site is contained within a Historic Environment Assessment spreadsheet. This assessment makes the following observation in terms of designated heritage assets:

*"Site forms part of setting of Grade II College Farmhouse and 14 High Street; as well as Roxton Conservation Area which bounds site along part of southern and eastern boundary. Potential to result in moderate level of harm to CA through loss of rural setting and introduction of high density development, as well as potentially minor impact on listed buildings (aside from College Farm, where the cumulative impact may be moderate through serious loss of wider rural setting)."*

- 2.2 The Grade II listed College Farmhouse is a 16<sup>th</sup>/17<sup>th</sup> century timber-framed building, which is considered to principally derive its significance from its historic and architectural interests, as a late medieval/early post-medieval farmstead in the local vernacular. The setting of this asset also makes a positive contribution to its significance, particularly in terms of its relationship with its gardens, former farmyard (the farm is no longer a functioning complex) and remaining (albeit converted) farm buildings. The allocation of the Site would not affect any of these contributions to its significance.
- 2.3 Parcel A is located c. 10m to the north of this asset, but the high garden walls creates a physical, as well as some visual, separation from the asset. The southern end of Parcel A was farmed from College Farmhouse in the 19<sup>th</sup> century, but this relationship is now extinct and is not evident in the appearance of the Site and listed building today. Parcel B is located c. 20m to the south, but has no known historic links with the farmhouse, and is also partly obscured by the intervening built and vegetated environment, and separated from the farmhouse by a road.
- 2.4 Inasmuch that the Site makes a contribution to the significance of this listed building, it is in terms of forming part of its wider rural setting and, in terms of the southern end of Parcel A, an intangible historic link. Parcel A is considered to make a limited/moderate contribution, whereas Parcel B is considered to make a very limited contribution.
- 2.5 In considering the potential affect of the allocation of the Site on College Farmhouse, it is worth considering the threshold between substantial and less than substantial harm that has been clarified in the Courts. Paragraphs 24 and 25 of *Bedford BC v Secretary of State for Communities and Local Government* [2013] EWHC 2847 are of relevance here, in the way they outline the assessment of 'harm' for heritage assets:
- “What the inspector was saying was that for harm to be substantial, the impact on significance was required to be serious such that very much, if not all, of the significance was drained away.*
- Plainly in the context of physical harm, this would apply in the case of demolition or destruction, being a case of total loss. It would also apply to a case of serious damage to the structure of the building. In the context of non-physical or indirect harm, the yardstick was effectively the same. One was looking for an impact which would have such a serious impact on the significance of the asset that its significance was either vitiated altogether [i.e. destroyed] or very much reduced.”*
- 2.6 The development of the farmland in Parcels A and B for residential units could potentially reduce or remove the limited/moderate and very limited contributions these parcels make to the significance of the listed building. However, it is also clear that the allocation would not have a physical effect on the fabric of the listed building, from which the majority of its significance is derived, nor the important links with its gardens, former farmyard and surviving farm buildings.

- 2.7 It is clear that such an affect would not have a '*serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced*'. Furthermore, careful consideration in the masterplanning process could reduce the level of harm further, such as through offsetting built form, and provision of open space and landscape planting. Therefore, the level of harm to College Farmhouse would unquestionably be within the 'less than substantial' range, with the exact level of harm dependant on the masterplanning treatment.
- 2.8 When considering planning applications that would affect the significance of a designated heritage asset, such as College Farmhouse, the National Planning Policy Framework (NPPF) is clear that 'great weight' must be given to the conservation of the asset in the planning balance, and the greater the importance of the asset, the greater the weight should be (Paragraph 199). Where less than substantial harm would occur, there should be clear and convincing justification for the proposals (Paragraph 200) and the public benefits of implementing the proposals should outweigh the level of harm (Paragraph 202). Therefore, the identification of less than substantial harm to a designated heritage asset would not necessarily prevent the grant of planning permission and equally does not require that an allocation is prohibited or very much reduced in capacity.
- 2.9 Similarly, the Grade II listed 14 High Street is an 18<sup>th</sup> century thatched roof cottage, which derives most of its significance from its built form, in terms of historic and architectural interest in particular and from its associations with its private gardens and location on the streetscene. It also derives some significance from the undeveloped paddock immediately to its rear, which forms part of its rural setting. Parcel A does not fall within the setting of this asset, nor does it contribute to its significance. Parcel B is located c. 30m to the north and is peripheral to the experience of the asset, such that its development, taking into account sympathetic masterplanning, could not result in more than a very low level of harm to its significance, if any were to accrue at all. Indeed, the concept masterplan demonstrates that the proposals could be achieved with a generous area of public open space in the southern end of Parcel B, closest to this asset, thus offsetting the built form and minimising, if not avoiding, harm.
- 2.10 With regard to Roxton Conservation Area, the designated extent appears to incorporate the historic core of the village and some adjoining paddocks and fields. The arrangement of the village core is broadly linear, stretching from College Farmhouse in the north to Roxton Park in the south. The character and appearance of the asset, from where it mostly draws its' significance, is very mixed and includes examples of whitewashed and thatched cottages, concrete tile roofed and bare red brick 20<sup>th</sup> century houses, arranged as single houses, terraces and semi-detached dwellings.
- 2.11 The setting of the asset is also mixed, with farmland to the north, east and west, and mostly 20<sup>th</sup> century housing to the south. Due to the local topography and built and planted environment, the allocation of the Site could only affect the northern end of the conservation area, with the majority of the asset experiencing no change, including and contribution that its setting makes to the east, west and south.

- 2.12 A small part of the conservation area overlaps with Parcel B, but this comprises a modern gravel track which is not considered to contribute to the character and appearance of the asset. Otherwise, Parcel B is considered to make a limited positive contribution to the significance of the asset by forming part of its farmed edge, albeit this pocket of farmland is experienced as 'cut-off' from the wider farmland and surrounded by mostly modern housing.
- 2.13 Parcel A contains a public footpath that aligns with the village Church, providing a historic route to the settlement. Otherwise, it also forms part of the rural edge of the asset, albeit there is limited opportunity to experience it from within the conservation area itself, and it is considered to make a very limited contribution to the significance of the asset.
- 2.14 Once more, there is every reason to believe that the sensitive masterplanning of the Site could further reduce the effect of implementing the proposed allocation, and regardless that reducing or removing the limited/very limited contribution of the Site could not equate to a substantial level of harm (see paragraph 2.5 above). Indeed, in terms of Parcel A's contribution as part of the rural edge and containing a historic footpath to the centre of the village, such matters are evidently not considered to be of such sensitivity by the Council that development should necessarily be prevented, provided suitable masterplanning treatment. This is evidenced by the grant of permission (Ref: 21/00014/MAO) to a parcel of farmland adjoining the eastern edge of the conservation area, to the south of the Site and containing a large part of the footpath that also runs through the Site.
- 2.15 Therefore, considering 14 High Street and the Roxton Conservation Area, here is every reason to believe that a sensitively designed development of the Site could minimise or avoid harm to these assets and be found acceptable in terms of the policies contained within the NPPF.

### **3. Non-Designated Heritage Assets**

- 3.1 In terms of non-designated heritage assets, the Council states in the Historic Environment Assessment spreadsheet that: *"Potential high harm to (?)locally significant archaeological remains = low/moderate overall impact?: Adjacent to area of probable prehistoric cropmarks. Pre-determination archaeological evaluation will be required"*.
- 3.2 The archaeological potential of the site has previously been considered through a review of Historic Environment Record (HER) data and a Site walkover. The eastern edge of Parcel A is included within an area of identified cropmarks, interpreted as prehistoric sub-rectangular enclosures and other linear features. However, the HER entry also notes that *"trenching in the area uncovered very few features, none of which were datable"*.
- 3.3 Archaeological investigations ahead of the A421 construction, c.200m to the north-west, identified a small group of early Roman sub-rectangular enclosures, which may have had Iron Age predecessors. Archaeological remains associated with these enclosures were sparse, with one possible circular structure, a four-post and a two-post structure, gullies and shallow hollows. Therefore, this appears to form a small rural farming settlement.

- 3.4 A geophysical survey and trial trench evaluation in support of the nearby planning application to the south-east (Ref: 21/00014/MAO) located two intercutting Bronze Age pits containing flints, pottery and evidence for metal working and fragments of amber, as well as environmental information. These remains were not considered to be of such significance by the Council that the permission was withheld.
- 3.5 Given the Site's location on river terrace gravels, and its proximity to prehistoric and Roman finds, there is considered a medium potential for them to contain archaeology from these periods. However, considering the results of nearby investigations, it is unlikely they would be of such significance as to warrant preservation *in situ*.
- 3.6 Both Parcel A and B are included in the theoretical extent of the medieval village of Roxton. However, the extent of this entry appears to be based on later post-medieval mapping, and its accuracy is therefore unknown. It is probable that both sites were farmland throughout these periods, as well as subsequently into the post-medieval and modern periods.
- 3.7 Indeed, late 19th and 20th century editions of the Ordnance Survey maps show both sites as farmland, with an area of farmyard for a now demolished farm complex extending into the eastern edge of Parcel B.
- 3.8 As such, it is considered that there is a low potential for either Parcel A or B to contain archaeological remains of such significance that they would inhibit the deliverability of the site or influence its capacity.
- 3.9 When evaluating the impact of development upon the potential archaeological remains of local value, it would be necessary for a decision-maker to make a '*balanced judgement*' taking into account
- (a) the scale of the harm or loss; and
  - (b) the significance of the asset.
- 3.10 As such, given the evidence that remains within the Site (if present) are unlikely to be of greater than 'local'/low significance, there is every reason to believe that they could be appropriately addressed through fieldwork mitigation. Such remains would not constrain the deliverability or capacity of the Site.

#### **4. Summary**

- 4.1 The Council's Assessment of the Site concludes that:

*"x - The proposal has the potential to cause harm to heritage assets. This harm may range from low to high. There may be options to avoid, reduce or mitigate this harm and where sites have not been ruled out altogether for other reasons, further assessment will be undertaken*



*to more fully explore impacts on significance and options for harm reduction and mitigation. This further assessment may ultimately lead to the conclusion that the site should not be allocated.”*

- 4.2 As discussed above, there is every reason to believe that the allocation of the Site and its eventual development would be NPPF compliant, and its capacity and deliverability should not be compromised either in terms of the potential loss of low/local value archaeology or in terms of the effect on the designated heritage assets discussed above.
- 4.3 As such, EDP finds conclusively that there is no reason on heritage grounds why the site cannot or should not be allocated in the emerging Bedford Borough Council's Local Plan (2040), as currently proposed.

## **Appendix Ev Illustrative Masterplan**



- Site Boundary
- Proposed all modes access point
- Proposed pedestrian access
- Existing Public Right of Way
- Existing National Cycle Route
- New walking route
- Main street
- Pavement and private drive
- Development parcels and indicative frontage

- Public Open Space
- Structural Open Space
- Existing trees retained
- Existing hedgerows retained
- Proposed new trees
- Proposed new hedges
- Potential attenuation area (subject to drainage design)
- Potential play area + 20m offset
- Potential combined pumping station + 15m offset

**Schedule of Concept Masterplan Areas:**

|   |                         |
|---|-------------------------|
| Site area (both parcels):                                     | 4.39ha                  |
| <b>Residential Development:</b><br>(48 homes @ average 30dph) | <b>1.59ha</b>           |
| <b>Public Open Space:</b><br>(including SUDS)                 | <b>2.73ha</b><br>0.12ha |



**DRAFT**

client:  
**Rainier Developments Limited**

project:  
**Land off Bedford Road, Roxton**

drawing title:  
**Concept Masterplan**

[urbandesignbox.co.uk](http://urbandesignbox.co.uk)

job number:  
**RAN104**

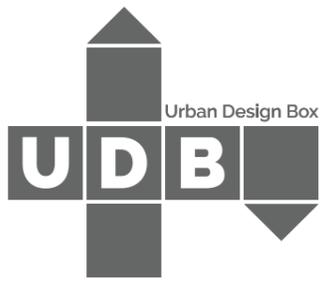
scale:  
**1:1250 @ A3**

date:  
**July 2022**

drawing number:  
**3204**

drawn:  
**AJ**

status:  
**Preliminary**



Copyright of Urban Design Box. This drawing is for illustrative purposes only and should not be used for any construction or estimation purposes. No liability or responsibility is accepted arising from reliance upon the information contained within this drawing. DO NOT SCALE DRAWINGS.