

# Biodiversity Net Gain Assessment



**Tyler  
Grange**

**Technical Note  
Land at J10, M40  
29<sup>th</sup> March 2022**

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Habitat Features Plan: 14047/P01c
Post-development Plan: 14047/P03
Piddington Site Baseline Plan: 14047/P11b
Piddington Site Post-Intervention Plan: 14047/P12a



# Summary

- S.1. Tyler Grange Group Ltd was instructed by Albion Land in August 2021 to undertake a Biodiversity Net Gain (BNG) assessment of land at Junction 10, M40, Bicester, hereafter referred to as the 'Site'. The Site comprises a 'Western Site', which is located to the west of the A43 and south of the B4100, and an 'Eastern Site'. The Eastern Site is located to the east of the A43 and B4100.
- S.2. Albion Land (the applicant) submitted two outline planning applications (Local Planning Authority References 21/03267/OUT and 21/03268/OUT) in September 2021 for the erection of buildings comprising logistics and ancillary office floorspace and associated infrastructure; construction of new Site access from the B4100; creation of internal roads and access routes; hard and soft landscaping and other associated infrastructure at the Eastern Site and Western Site respectively. Application 21/03267/OUT relates to the Eastern Site and application 21/03268/OUT relates to the Western Site.
- S.3. A suite of parameter plans (including vegetation retention and removal plans) were submitted as part of these outline applications, which future reserved matters applications will be required to comply with. An application for full planning permission was also submitted (Local Planning Authority reference 21/03266/F) for enabling works at the Western Site.
- S.4. An Environmental Statement was submitted with each application, which included a biodiversity chapter (Chapter 12). This Biodiversity Net Gain (BNG) technical note and accompanying BNG metric supplements the information contained within Chapter 12 of the Environmental Statement.
- S.5. Although the proposals involve retaining and enhancing as much existing vegetation as possible and providing significant landscaping and ecological enhancements within the Site, it was identified during early-stage BNG calculations that achieving a net gain in biodiversity units was not possible solely within the Site itself. Therefore, an off-Site mitigation area under the ownership of the applicant is proposed to be used (hereafter referred to as 'the Piddington Site') to provide additional biodiversity enhancements. This technical note explains both the on-Site and off-Site BNG calculations and evaluations.
- S.6. Data collected from habitat surveys and information from the submitted Vegetation Retention & Removal Parameter Plans (see **Appendix 1**) and illustrative masterplan (see **Appendix 2**) were applied to the Defra Biodiversity Metric 2.0 (ref. JP029)<sup>1</sup>.
- S.7. Post-development, the Western Site development will achieve a net gain of +28.10% in Habitat Units and the Eastern Site development will achieve a net gain of +11.66% in Habitat Units. These results are inclusive of the proposed off-site enhancement at the Piddington Site.
- S.8. Enhancement and creation of hedgerows both within the Site and at the Piddington Site results in a total gain of +11.61% in hedgerow units for the Western Site and +12.58% for the Eastern Site.
- S.9. At the time of writing, achieving a 10% net gain is not mandated by law although this is anticipated to be mandated in future by the Environment Act 2021. The proposals exceed this threshold. The

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<sup>1</sup> Note, whilst it has been superseded by version 3.0, the 2.0 metric was being utilised already and following Natural England advice was used for the duration of this project



proposals are also compliant with relevant policy on biodiversity enhancements within the National Planning Policy Framework 2021 and local policy.



# Section 1: Introduction

- 1.1. This technical note has been prepared by Tyler Grange Group Ltd on behalf of Albion Land. It presents the findings of a Biodiversity Net Gain (BNG) assessment of Albion Land's proposed development at land at Junction 10 of M40, Bicester, (hereafter referred to as the 'Site'). The assessment is based on the development proposals for the Site, including the proposed off-Site compensation areas located at land to the north of Piddington, Oxfordshire (hereafter referred to as 'the Piddington Site').
- 1.2. Tyler Grange Group Ltd was instructed by Albion Land in August 2021 to undertake a Biodiversity Net Gain (BNG) assessment of land at Junction 10, M40, Bicester, hereafter referred to as the 'Site'. The Site comprises a 'Western Site', which is located to the west of the A43 and south of the B4100, and an 'Eastern Site'. The Eastern Site is located to the east of the A43 and B4100.
- 1.3. Albion Land (the applicant) submitted two outline planning applications (Local Planning Authority References 21/03267/OUT and 21/03268/OUT) in September 2021 for the erection of buildings comprising logistics and ancillary office floorspace and associated infrastructure; construction of new Site access from the B4100; creation of internal roads and access routes; hard and soft landscaping and other associated infrastructure at the Eastern Site and Western Site respectively. Application 21/03267/OUT relates to the Eastern Site and application 21/03268/OUT relates to the Western Site.
- 1.4. A suite of parameter plans (including vegetation retention and removal plans) were submitted as part of these outline applications, which future reserved matters applications will be required to comply with. An application for full planning permission was also submitted (Local Planning Authority reference 21/03266/F) for enabling works at the Western Site.
- 1.5. An extended Phase 1 Habitat survey of the Site was undertaken by Daniel Lock, a suitably experienced ecologist and member of the Chartered Institute of Ecology and Environmental Management (CIEEM), on 17th May 2021 (see associated Environmental Statement chapter 12 for full details). Data gathered from the extended Phase 1 Habitat survey informed the parameter plans and will ensure that the development minimises its impacts on local biodiversity as far as possible and maximises opportunities for enhancement. It was identified during early-stage BNG calculations that achieving a net gain in biodiversity units was not possible solely within the Site itself. Therefore, an off-Site mitigation area under the ownership of the applicant is proposed to be used (hereafter referred to as 'the Piddington Site') to provide additional biodiversity enhancements.
- 1.6. Following the submission of the planning applications, the local planning authority has requested the completion of the DEFRA BNG metric in order to establish the biodiversity value of the Site and the Piddington Site and to demonstrate the delivery of a net gain in biodiversity post-development.
- 1.7. Ecological survey work enabled the accurate completion of Natural England's Biodiversity Net Gain (BNG) Metric (The Biodiversity Metric 2.0 (JP029)), which should be read with this note (ref: 14047\_BNG2.0\_04032022\_JW). The Defra BNG Metric 2.0 has been used. This is because draft BNG calculations were being prepared to inform the development (using the Defra BNG Metric 2.0) prior to the publication of the Defra 3.0 metric in July 2021. This is in-line with Natural England's online



guidance, which states that "users of the previous Biodiversity Metric 2.0 should continue to use that metric (unless requested to do otherwise by their client or consenting body) for the duration of the project it is being used for as they may find that the biodiversity unit values metric 2.0 generates will differ from those generated by Biodiversity Metric 3.0." and this advice was followed<sup>2</sup>.

## Site Context

- 1.8. The Site is located at Junction 10 of the M40 (OS Grid reference SP 54744 28859) and is shown below in **Figure 1.1**. The Site comprises an area of land to the west of the A43 (hereafter referred to as 'the Western Site') and an area of land to the east of the A43 (hereafter referred to as 'the Eastern Site') (the 'Western Site' and 'Eastern Site' are collectively referred to as 'the Site'). Existing habitats within the Site comprise predominately arable habitat with small areas of buildings, improved grassland, scrub and tall ruderal of negligible ecological importance and hedgerows, ponds and scattered trees of local ecological importance.



**Figure 1.1:** Indicative red line boundary of the development Site (Background mapping source: Google 2022)

- 1.9. The Piddington Site is located to the north of Piddington (approximate Ordnance Survey grid reference at centre: SP 64167 18849) and measures approximately 20.22 hectares in area. As shown on **Figure 1.2** below, the Piddington Site comprises two arable fields with tall ruderal, hardstanding, a pond and wet ditches with associated hedgerows.

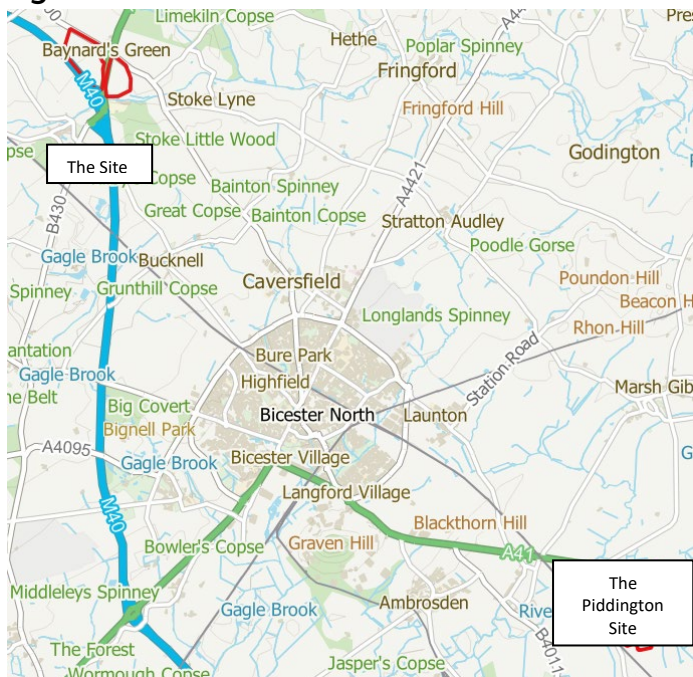
<sup>2</sup> Natural England (2021) The Biodiversity Metric 3.0 (JP039) [Online] Available at: <http://publications.naturalengland.org.uk/publication/6049804846366720> [Accessed: 22/03/2022]





**Figure 1.2:** The Piddington Site (Background mapping source: Google © 2022)

1.10. **Figure 1.3** below shows the relative locations of both the Site and the Piddington Site.



**Figure 1.3:** Relative locations of the Site and the Piddington Site (Background mapping source: OS Open Data © 2021)

## Policy and Legislative Background

1.11. The Environment Act, which received Royal Assent in 2021, mandates a requirement for development to deliver 10% measurable net gains in biodiversity. However, there is a two-year 'grace period' before this is legally enforceable.





- 1.12. There is no existing policy requirement for a 10% net gain in biodiversity.
- 1.13. In Paragraph 179, the National Planning Policy Framework (NPPF), July 2021, states that planning decisions should contribute to and enhance the natural environment by, amongst others, *"identifying and pursuing opportunities for securing measurable net gains for biodiversity"*.
- 1.14. The Cherwell Local Plan 2015 does not specify the minimum percentage gain needed for biodiversity net gain (BNG) assessments. However, policy ESD10 states that *"...a net gain in biodiversity will be sought by protecting, managing, enhancing and extending existing resources, and by creating new resources"*.

## Methods and Objectives

- 1.15. The DEFRA Biodiversity Metric 2.0 (JP029) was used as a calculator to *"measure and account for biodiversity losses and gains resulting from development"*. The calculator requires baseline data as well as information on habitats lost and created to calculate the total number of biodiversity units on Site and at the Piddington Site pre and post development.
- 1.16. An extended Phase 1 Habitat survey of the Site was undertaken by Daniel Lock, a suitably experienced ecologist and member of the Chartered Institute of Ecology and Environmental Management (CIEEM), on 17th May 2021. This involved a Site walkover survey to identify the habitats on Site and assess the respective conditions of the habitat based on the DEFRA 2.0 metric habitat condition assessment. This was carried out to determine the deliverable habitat units achieved by the development proposals. A development achieves a net gain when the total biodiversity units present post-development are higher than that of the biodiversity units present prior to development.
- 1.17. The BNG assessment has been completed separately for the Western Site and the Eastern Site. This is because separate planning applications have been submitted for the Eastern Site and the Western Site and therefore this will allow Cherwell District Council officers to understand the net gain achieved by each development. The habitats within the Western Site and Eastern Site are described within the 'Site' tabs of the respective BNG Metrics.
- 1.18. A walkover survey of the Piddington Site was conducted in December 2021 by Jessica Whittaker, a suitably experienced ecologist. A note was made of existing habitat types and the calculator automatically assigns distinctiveness scores to each habitat, with the user inputting scores for condition, strategic significance and total area (in hectares). It was considered that all existing/new habitats are of "low strategic significance". The habitats within the Piddington Site are described within the 'off-Site' tabs of the Biodiversity Metric 2.0.
- 1.19. A full copy of the BNG Metrics (ref: 14047\_BNG2.0\_JW\_AP\_18032022\_WEST and 14047\_BNG2.0\_JW\_AP\_18032022\_EAST) is supplied with this technical note for detailed reference as required
- 1.20. All on-Site and off-Site habitats were assessed with reference to the UK Habitat Classification (The UK Habitat Classification Working Group, 2018) and the Biodiversity Metric technical supplement (Crosher *et al.* 2019) to determine their condition and ecological importance.



- 1.21. A hedgerow survey was also undertaken using the methodology detailed in 'The Hedgerow Survey Handbook. 2nd Edition' (DEFRA 2007), in order to determine hedgerow species-richness, as recommended in the Biodiversity Metric 2.0.
- 1.22. Based on this survey methodology, 30m sections of each hedgerow were surveyed and if 5 or more native wooded species were recorded in that section, the hedge was classified as species-rich. If a hedge was less than 30m in length, the entire length of hedge was surveyed using this methodology. In addition, to identifying the species growing in the hedgerows, all hedge features, apparent management and dimensions were recorded, along with their condition.
- 1.23. Biodiversity offsetting involves the provision of compensatory habitat for residual habitat losses and/or indirect effects arising from development that persists despite the implementation of appropriate avoidance and mitigation measures. A calculation is produced to assess the effects of a scheme on the habitats present versus the proposed compensatory habitat creation and enhancement measures. In order to determine whether offsetting is required, the biodiversity impact assessment metric is used to calculate the biodiversity value of a Site before and after development in terms of 'biodiversity units' to give an overall biodiversity net gain or loss.
- 1.24. Given the respective sizes and baseline biodiversity units of the Eastern Site and the Western Site, approximately two thirds of the Piddington Site habitat areas is allocated to the Western Site BNG metric and approximately one third of the Piddington Site is allocated to the Eastern Site BNG metric to be proportionate. It would therefore be possible to complete compensation works for each of the outline applications separately if required. However, it is intended that the Piddington Site will form one continuous area of habitat provision to ensure habitat connectivity. In the event that only either the Eastern Site development or the Western Site development was approved, the entire Piddington Site could be allocated to the approved development, resulting in a higher net gain than that presented within this technical note.



## Section 2: Existing Baseline Site Habitats

- 2.1 The following habitats are present within the red line boundary of the application Site and are illustrated on the Habitat Features and Bat Roost Plan (Ref: 14047/P01) located at the rear of this report. A brief summary of each habitat is provided below along with the habitat condition and category it is assigned within the metric. Full details of each habitat and the rationale for condition assessments are detailed within the notes section of the metric (ref: 14047\_BNG2.0\_JW\_04032022).
- 2.2 The Phase 1 Habitat types identified have been converted into UK Habitat types<sup>3</sup> (using the conversion tool within the metric) as these are the definitions that the metric is based upon.
- 2.3 The metric demonstrated that the baseline 'biodiversity value' for the Western Site is 92.51 Habitat Units and 49.09 Habitat Units for the Eastern Site. The Western Site was found to have 21.01 Hedgerow Units at baseline while the Eastern Site had 12.54 Hedgerow Units. A summary of baseline habitat units is shown in **Table 2.1** and hedgerow units in **Table 2.2** below.

**Table 2.1:** Site baseline habitats.

Broad Habitat Type	Area (ha) Western Site	Area (ha) Eastern Site	Condition	Total Habitat Units Western Site	Total Habitat Units Eastern Site
Cropland; Cereal crops	40.659	22.611	N/A - Agricultural	81.32	45.22
Lakes; Ponds (Non-Priority Habitat)	N/A	0.007	Poor	N/A	0.04
Urban-Developed land; sealed surface	0.029	N/A	N/A - Other	0.00	N/A
Cropland; Arable field margins tussocky	2.683	0.907	N/A - Agricultural	10.73	1.50
Heathland and shrub - Bramble scrub	0.049	0.015	Fairly Poor	0.29	0.09
Sparsely vegetated land - Ruderal/Ephemeral	0.03	N/A	Fairly Poor	0.09	N/A
Urban - Street Tree	0.0183	0.027	Moderate	0.07	0.11
<b>Total habitat units at baseline:</b>				92.51	49.09

<sup>3</sup> UK Habitat classification (2022) [Online] Available at: <https://ukhab.org/> [Accessed: 09/01/2022]



**Table 2.2:** Site hedgerow baseline

Hedgerow Type	Length (km) Western Site	Length (km) Eastern Site	Condition	Total Habitat Units Western Site	Total Habitat Units Eastern Site
Native Hedgerow	1.476	1.595	Poor	2.952	0.881
Native Species Rich Hedgerow with Trees	0.61	1.062	Moderate	5.368	0.875
Native Species Rich Hedgerow	1.296	N/A	Moderate	11.4048	N/A
Native Hedgerow	0.293	N/A	Moderate	1.2892	N/A
Hedge Ornamental Non Native	0.071	N/A	Moderate	0	N/A
<b>Total hedgerow units at baseline:</b>				21.01	12.54



## Section 3: Post Development Site Habitats

- 3.1. Post-development habitats were determined from the proposed vegetation removal and retention parameter plans (**Appendix 1**) and illustrative masterplan (**Appendix 2**) for the Site and are illustrated on the 14047/P03 at the end of this report.
- 3.2. The BNG metric, demonstrated that the post development 'biodiversity value' of the Western Site is 50.85 Habitat Units, and 17.42 Hedgerow Units while the Eastern Site is 19.04 Habitat Units and 9.46 Hedgerow Units. A summary of post development on-Site habitats and hedgerows are shown in **Tables 3.1 and 3.2** below.

**Table 3.1:** Post Development Site habitats

Broad Habitat Type	Area (ha) Western Site	Area (ha) Eastern Site	Condition	Total Habitat Units Western Site	Total Habitat Units Eastern Site
Urban - Developed land; sealed surface	16.315	9.515	N/A - Other	0.00	0.00
Urban - Developed land; sealed surface	15.143	8.817	N/A - Other	0.00	0.00
Urban - Sustainable urban drainage feature	2.101	0.739	Moderate	5.06	1.78
Urban - Amenity	0.996	0.974	Poor	1.92	1.88
Grassland - Other neutral grassland	2.46	N/A	Moderate	13.78	N/A
Urban - Street Tree	1.013	0.507	Moderate	1.55	0.78
Heathland and shrub- Mixed scrub	3.662	1.528	Moderate	26.33	10.98
Woodland and forest - Other woodland; broadleaved	1.203	1.967	Moderate	2.21	3.62
<b>Total post development units:</b>				50.85	19.04



**Table 3.2:** Post Development Site hedgerow habitats

Hedgerow Type	Length (km) Western Site	Length (km) Eastern Site	Condition	Total Hedgerow Units Western Site	Total Hedgerow Units Eastern Site
Native Hedgerow	N/A	0.881	Poor	N/A	1.762
Native Species Rich Hedgerow with Trees	0.284	0.875	Moderate	2.4992	7.7
Native Species Rich Hedgerow	1.296	N/A	Moderate	11.4048	N/A
Native Hedgerow	0.293	N/A	Moderate	1.2892	N/A
Hedge Ornamental Non Native	0.071	N/A	Moderate	0	N/A
Native Species Rich Hedgerow with Trees - created	0.7	N/A	Moderate	2.63	N/A
<b>Total post development units:</b>				17.42	9.46



## Section 4: Piddington Site Baseline

- 4.1. Draft BNG calculations for the Site showed a net loss in habitat and hedgerow units despite the vegetation retention and areas of landscaping proposed within the Site. Accordingly, off-site enhancement is proposed to ensure that the development delivers a biodiversity net gain.
- 4.2. The habitats below are present within the proposed off-Site compensation area (the Piddington Site) and are illustrated on the BNG Piddington Site Baseline Plan appended within this technical note (ref: 14047/P011). As above, a brief summary of each habitat is provided along with the habitat condition and category it is assigned within the metric. Full details of each habitat and the rationale for condition assessments are detailed within the notes section of the metric referenced above.
- 4.3. A proportion of the Piddington Site has been allocated to each of the BNG metrics for the Eastern and Western Site (see paragraph 1.18). The metric demonstrated that the baseline 'biodiversity value' of the Piddington Site is 26.28 Habitat Units and 11.78 Hedgerow Units associated with the Western Site BNG metric and 14.15 Habitat Units and 6.35 Hedgerow Units associated with the Eastern Site BNG metric as shown in **Table 4.1 and 4.2** below. Detailed comments can be found within the BNG Metrics associated with this technical note.

**Table 4.1:** Piddington Site compensation baseline habitats

Broad Habitat Type	Area (ha) allocated to the Western Site BNG Metric	Area (ha) allocated to the Eastern Site BNG Metric	Condition	Total Habitat Units allocated to the Western Site BNG Metric	Total Habitat Units allocated to the Eastern Site BNG Metric
Cropland – Cereal crops	12.181	6.559	N/A - Agricultural	24.36	13.12
Sparsely vegetated land – Ruderal/ Ephemeral	0.709	0.382	Poor	1.42	0.76
Urban – Artificial unvegetated, unsealed surface	0.143	0.077	N/A – Other	0.00	0.00
Lakes – Ponds (Non-Priority Habitat)	0.007	0.004	Moderate	0.08	0.05
Lakes - Ditches	0.104	0.056	Poor	0.42	0.22
<b>Total Piddington Site baseline habitat units:</b>				26.28	14.15



**Table 4.2:** Piddington Site hedgerow baseline

Hedgerow Type	Length (km) allocated to the Western Site BNG Metric	Length (km) allocated to the Eastern Site BNG Metric	Condition	Total Habitat Units allocated to the Western Site BNG Metric	Total Habitat Units allocated to the Eastern Site BNG Metric
Native Hedgerow - Associated with bank or ditch	0.826	0.445	Good	9.912	5.34
Native Species-rich hedgerow with trees	0.312	N/A	Good	1.872	1.008
<b>Total Piddington Site baseline hedgerow units:</b>				11.78	6.35





## Section 5: Piddington Site Post Intervention

- 5.1. Post-intervention habitats at the Piddington Site are proposed with a view to achieving a minimum 10% net gain in habitats and hedgerows for the Eastern Site and Western Site respectively. The proposed habitats are illustrated on the Post Intervention Habitats Plan (ref: 14047/P12).
- 5.2. The metric, shown in **Table 5.1 and 5.2**, demonstrated that the post intervention ‘biodiversity value’ of the Piddington Site is 85.66 Habitat Units and 17.42 Hedgerow Units associated with the Western Site, and 47.80 Habitat Units and 11.00 Hedgerow Units associated with the Eastern Site.
- 5.3. Overall, the Site will be enhanced by converting the dominant habitat (arable), which is of negligible ecological importance, to good condition, neutral grassland. This, as well as retaining other existing habitats, the planting of a double, staggered hedgerow and creation of a pond will allow opportunities for species utilising different types of habitats to use the Site, in keeping with the current surrounding area.
- 5.4. The off-Site enhancements at the Piddington Site will contribute to biodiversity within the district and the newly created and enhanced habitats, in addition to achieving a biodiversity net gain, will benefit faunal species. For example, the grassland habitat will provide foraging opportunities for birds and will be managed to provide suitable habitat for ground nesting birds while the hedgerows will provide further nesting opportunities for bird species. Additional hedgerows will be planted, which will provide additional habitat connectivity to the wider landscape where this habitat type is prevalent. The habitats proposed comprise species native to southern England which are considered to be in keeping with the surrounding landscape. Detailed comments on each post-development Piddington Site habitat can be found within the BNG Metrics associated with this technical note.

**Table 5.1:** Off-site compensation post intervention habitats

Broad Habitat Type	Area (ha) associated with the Western Site	Area (ha) associated with the Eastern Site	Condition	Total Habitat Units associated with the Western Site	Total Habitat Units associated with the Eastern Site
Sparsely vegetated land – Ruderal/ Ephemeral	0.709	0.382	Poor	1.42	0.76
Urban – Artificial unvegetated, unsealed surface	0.143	0.077	N/A – Other	0.00	0.00
Lakes – Ponds (Non- Priority Habitat) – Retained	0.007	0.004	Moderate	0.08	0.05
Lakes - Ditches	0.104	0.056	Poor	0.42	0.22
Lakes – Ponds (Non- Priority Habitat) – Created	N/A	0.17	Moderate	N/A	1.83



Grassland – Other neutral grassland	12.181	6.389	Good	85.66	44.93
<b>Total post intervention Piddington Site Habitat Units:</b>				87.58	47.80

**Table 5.2:** Off-site compensation post intervention hedgerow

Hedgerow Type	Length (km) associated with the Western Site	Length (km) associated with the Eastern Site	Condition	Total Habitat Units associated with the Western Site	Total Habitat Units associated with the Eastern Site
Native Hedgerow	0.826	0.445	Good	9.912	5.34
Native Hedgerow – Associated with bank or ditch	0.312	0.168	Good	1.872	1.008
Native Species Rich Hedgerows with trees	1.501	1.239	Moderate	5.63	4.65
<b>Total post intervention Piddington Site Hedgerow Units:</b>				17.42	11.00



## Section 6: Results Summary

- 6.1 The BNG metrics demonstrate that a **+28.10%** net gain in biodiversity value (equivalent to +25.99 Habitat Units) and a **+11.61%** net gain in hedgerow units (equivalent to +2.44 Hedgerow Units) will result from the proposed development of the Western Site.
- 6.2 The BNG metrics demonstrate that a **+11.66%** net gain in biodiversity value (equivalent to +5.72 Habitat Units) and a **+12.58%** net gain in hedgerow units (equivalent to +1.58 Hedgerow Units) will result from the proposed development of the Eastern Site.
- 6.3 A summary of headline results from the 2.0 Defra Metrics is provided in **Figure 6.1** and **Figure 6.2** below. A full copy of the BNG Metrics (ref: 14047\_BNG2.0\_JW\_AP\_18032022\_WEST and 14047\_BNG2.0\_JW\_AP\_18032022\_EAST) is supplied with this technical note for detailed reference as required.

On-site baseline	Habitat units	92.51
	Hedgerow units	21.01
	River units	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	Habitat units	57.20
	Hedgerow units	17.82
	River units	0.00
Off-site baseline	Habitat units	26.28
	Hedgerow units	11.78
	River units	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	Habitat units	87.58
	Hedgerow units	17.42
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	Habitat units	25.99
	Hedgerow units	2.44
	River units	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	Habitat units	28.10%
	Hedgerow units	11.61%
	River units	0.00%

**Figure 6.1:** Summary of results for Biodiversity Net Gain of both on Site and off-Site areas for the Western Site.

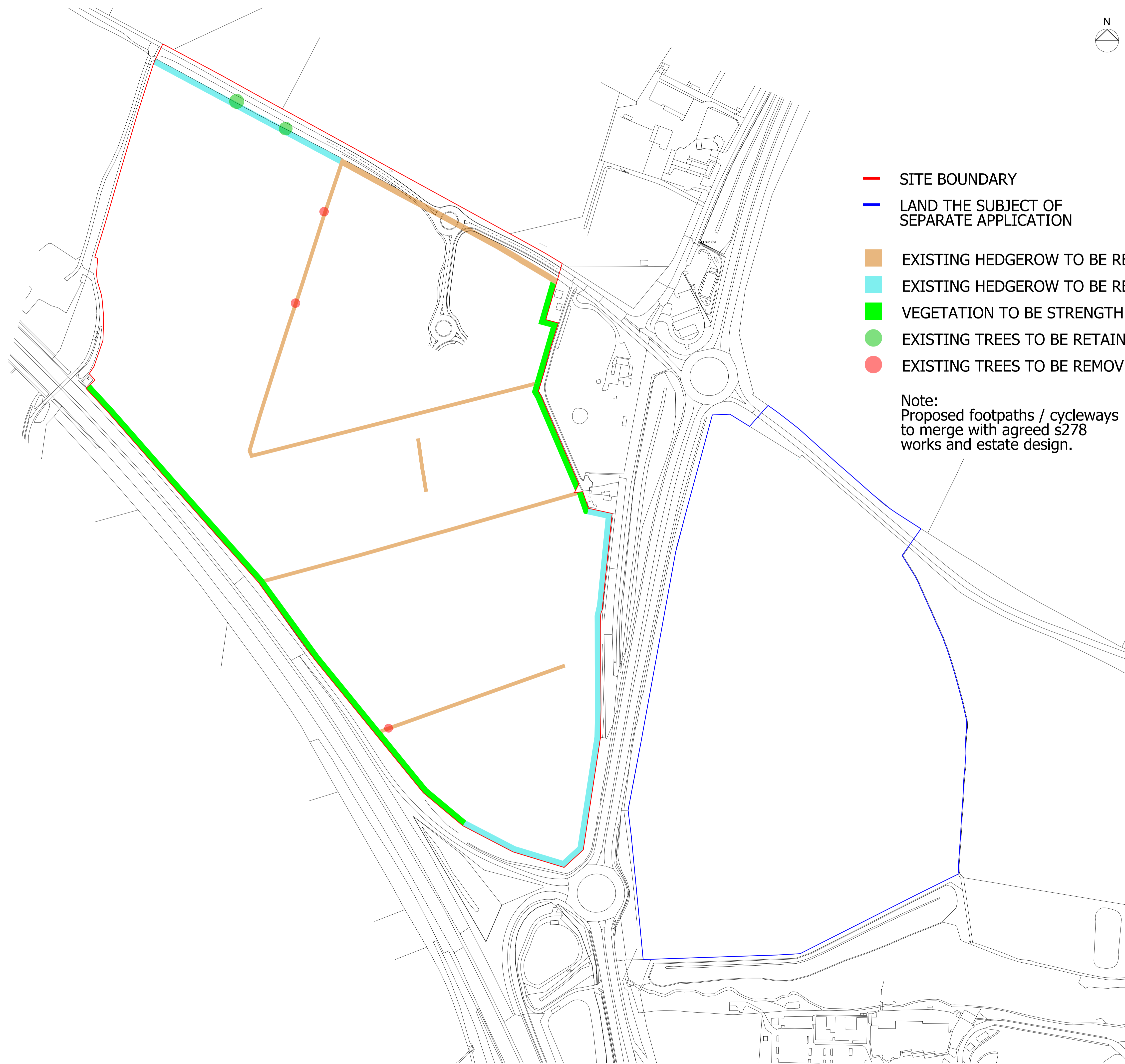
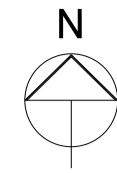
On-site baseline	Habitat units	49.09
	Hedgerow units	12.54
	River units	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	Habitat units	21.17
	Hedgerow units	9.46
	River units	0.00
Off-site baseline	Habitat units	14.15
	Hedgerow units	6.35
	River units	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	Habitat units	47.80
	Hedgerow units	11.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	Habitat units	5.72
	Hedgerow units	1.58
	River units	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	Habitat units	11.66%
	Hedgerow units	12.58%
	River units	0.00%

**Figure 6.2:** Summary of results for Biodiversity Net Gain of both on Site and off-Site areas for the Eastern Site.



# Appendix 1: Vegetation Retention and Removal Plan





- SITE BOUNDARY
- LAND THE SUBJECT OF SEPARATE APPLICATION
- EXISTING HEDGEROW TO BE REMOVED
- EXISTING HEDGEROW TO BE RETAINED & ENHANCED
- VEGETATION TO BE STRENGTHENED
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED

Note:  
Proposed footpaths / cycleways  
to merge with agreed s278  
works and estate design.

Rev	Description	Chk	Date

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Project Title: **JUNCTION 10 M40**

Drawing Title: **PARAMETER PLAN 03  
VEGETATION RETENTION  
& REMOVAL**

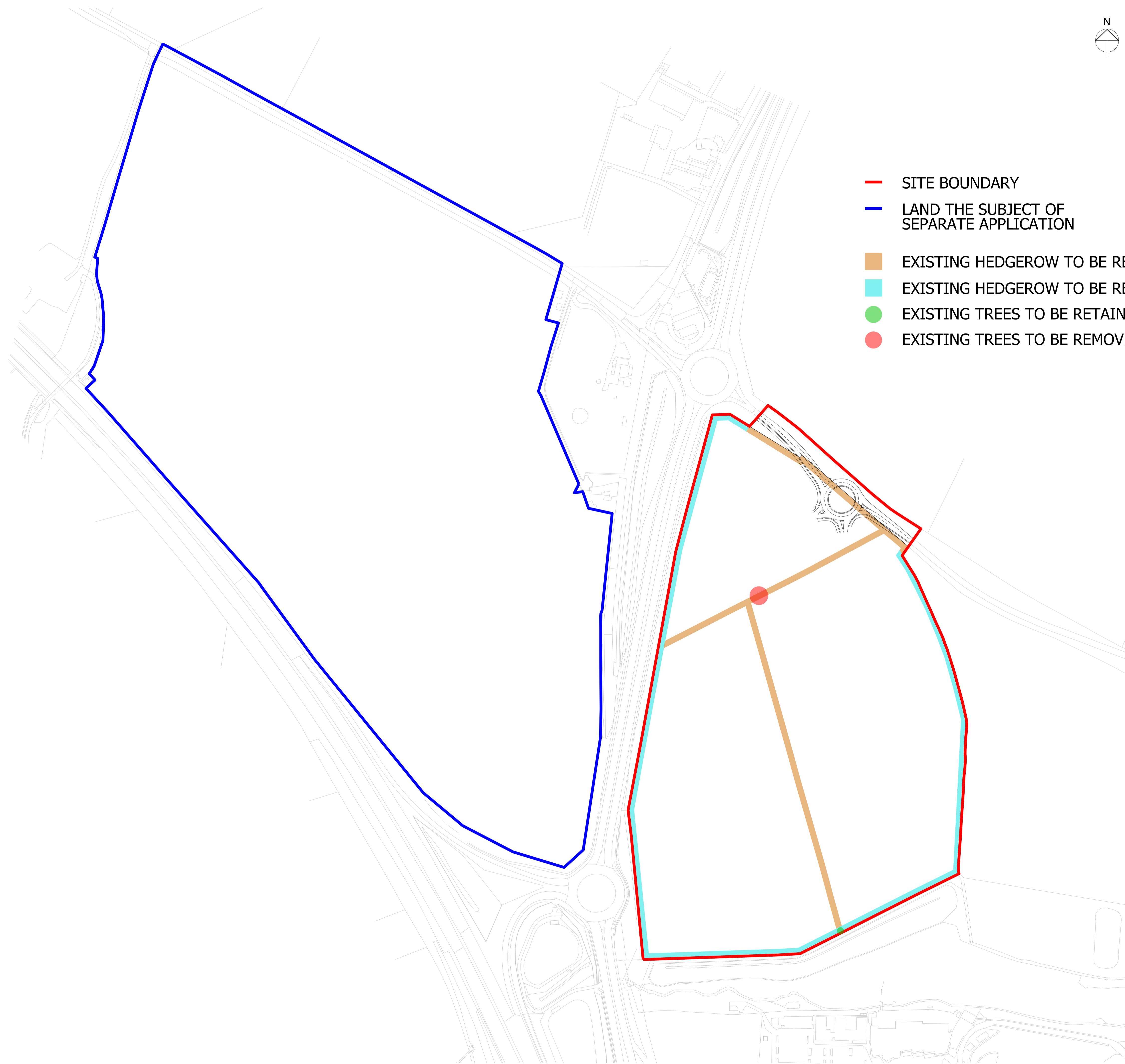
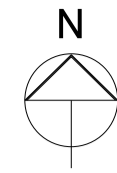
Drawing Status: **TOWN PLANNING**

Scale: 0 20 metres 200

Drawn By: A S | Scale: 1:2500 @ A1 | Date: 27/08/2021 | Chk'd By: S M



Drawing No: **20005 - TP - 004** | Rev: -



- SITE BOUNDARY
- LAND THE SUBJECT OF SEPARATE APPLICATION
- EXISTING HEDGEROW TO BE REMOVED
- EXISTING HEDGEROW TO BE RETAINED & ENHANCED
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED

Rev	Description	Chk	Date
	Peer House 8 -14 Verulam Street London WC1X 8LZ		
	tel +44(0)20 7400 2120		
	enquiries@cornisharchitects.com www.cornisharchitects.com		

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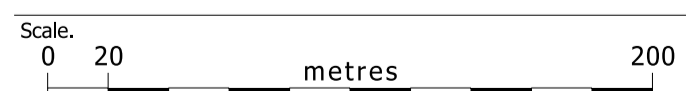


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Project Title: **JUNCTION 10 M40**

Drawing Title: **PARAMETER PLAN 08  
VEGETATION RETENTION  
& REMOVAL**

Drawing Status: **TOWN PLANNING**



Drawn By:	Scale:	Date:	Chk'd By:
C S	1:2500 @ A1	27/08/2021	S M



Drawing No.	Rev.
20005 - TP - 010	-

# Appendix 2: Illustrative Masterplan





**NOTES**

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Rev	Description	Chk	Date
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**RIBA**   
Chartered Practice

**cornisharchitects**

Project Title: **JUNCTION 10 M40**

Drawing Title: **ILLUSTRATIVE MASTERPLAN**

Drawing Status: **TOWN PLANNING**



Drawn By	Scale	Date	Chk'd By
S K	1:2500 @ A1	20/09/2021	C S

**ALBION LAND** 

Drawing No.	Rev.
<b>20005 - TP - 020</b>	-



## Plans:

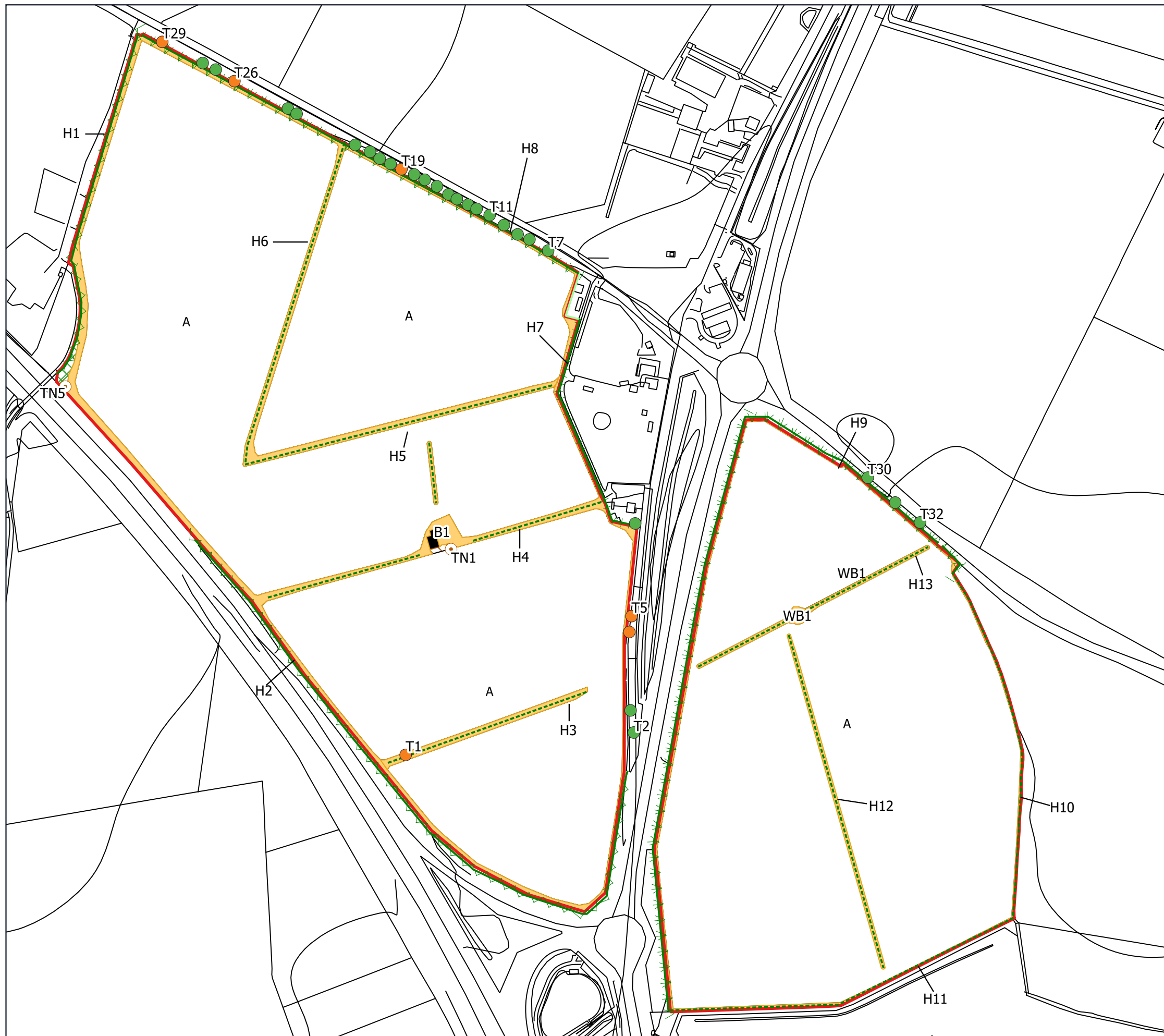
Habitat Features Plan (Site baseline): 14047/P01c

Post-development Plan (Site post-intervention): 14047/P03

Piddington Site Baseline Plan: 14047/P11b

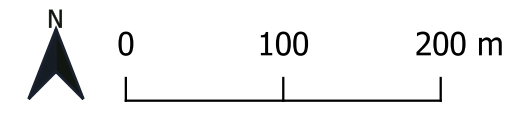
Piddington Site Post-intervention Plan: 14047/P12a





**Legend:**

- Approximate Site boundary
- Arable
- Waterbody
- Buildings
- Improved grassland
- Dense scrub
- Tall ruderal
- Intact species-rich hedgerow
- Intact species-rich hedgerow with trees
- Defunct species-poor hedgerow
- Species-poor hedgerow with trees
- Coniferous hedge
- Low suitability tree
- Moderate suitability tree
- Target Note



**Project** Land at J10/M40, Bicester  
**Drawing Title** Habitat Features and Preliminary Bat Roost Assessment Plan  
**Scale** As Shown (Approximate) REDACTED  
**Drawing No.** 14047/P01c  
**Date** 21st September 2021  
**Checked** AP/AG



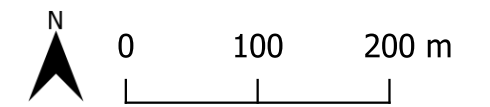
WeWork Offices, 30 Stamford Street, Southbank, London, SE1 9LQ  
 T: 020 393 494 70 E: info@tylergrange.co.uk W: www.tylergrange.co.uk



**Legend:**

**Habitat types post-development:**

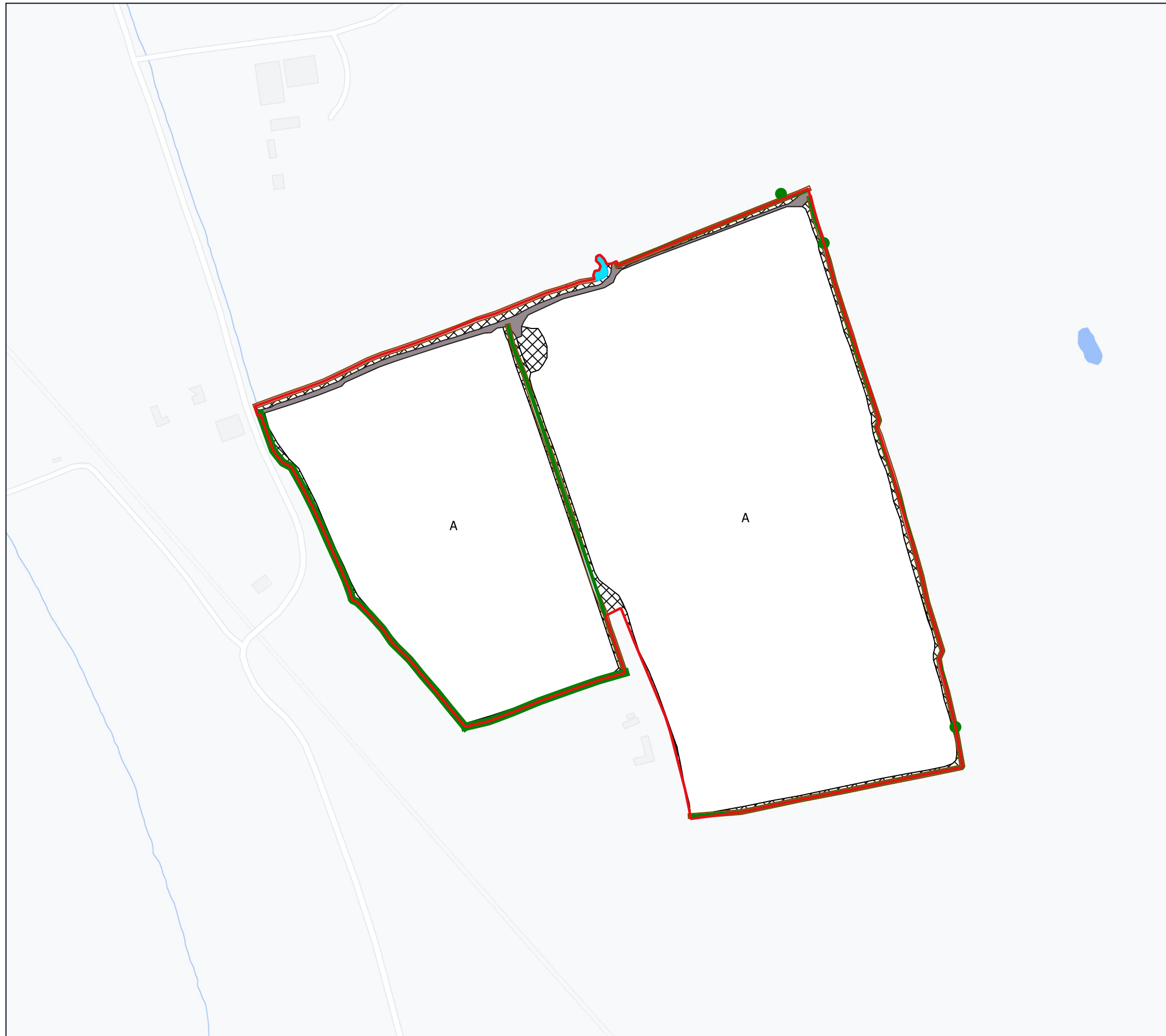
- A Amenity Grassland
- Building
- Neutral Grassland
- Hardstanding
- SUDs Feature
- Woodland
- Mixed Scrub (Native Groundcover Planting)
- Intact species-rich hedgerow - retained
- Intact species-rich hedgerow with trees - retained
- Coniferous hedgerow - retained
- Species-poor hedgerow with trees - retained




Project	Land at J10/M40, Bicester
Drawing Title	Post-development Site habitats plan
Scale	As Shown (Approximate)
Drawing No.	14047/P03
Date	March 2022
Checked	JD/AP



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## Legend

 Piddington Site boundary

## Habitats


 Arable

 Ruderal

 Hardstanding

 Scattered trees

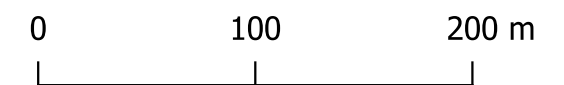
 Native Hedgerow- species poor

 Native Hedgerow with Associayed Ditch- species poor

 Native Hedgerow and Trees with Associated Ditch- species poor

 Wet ditch

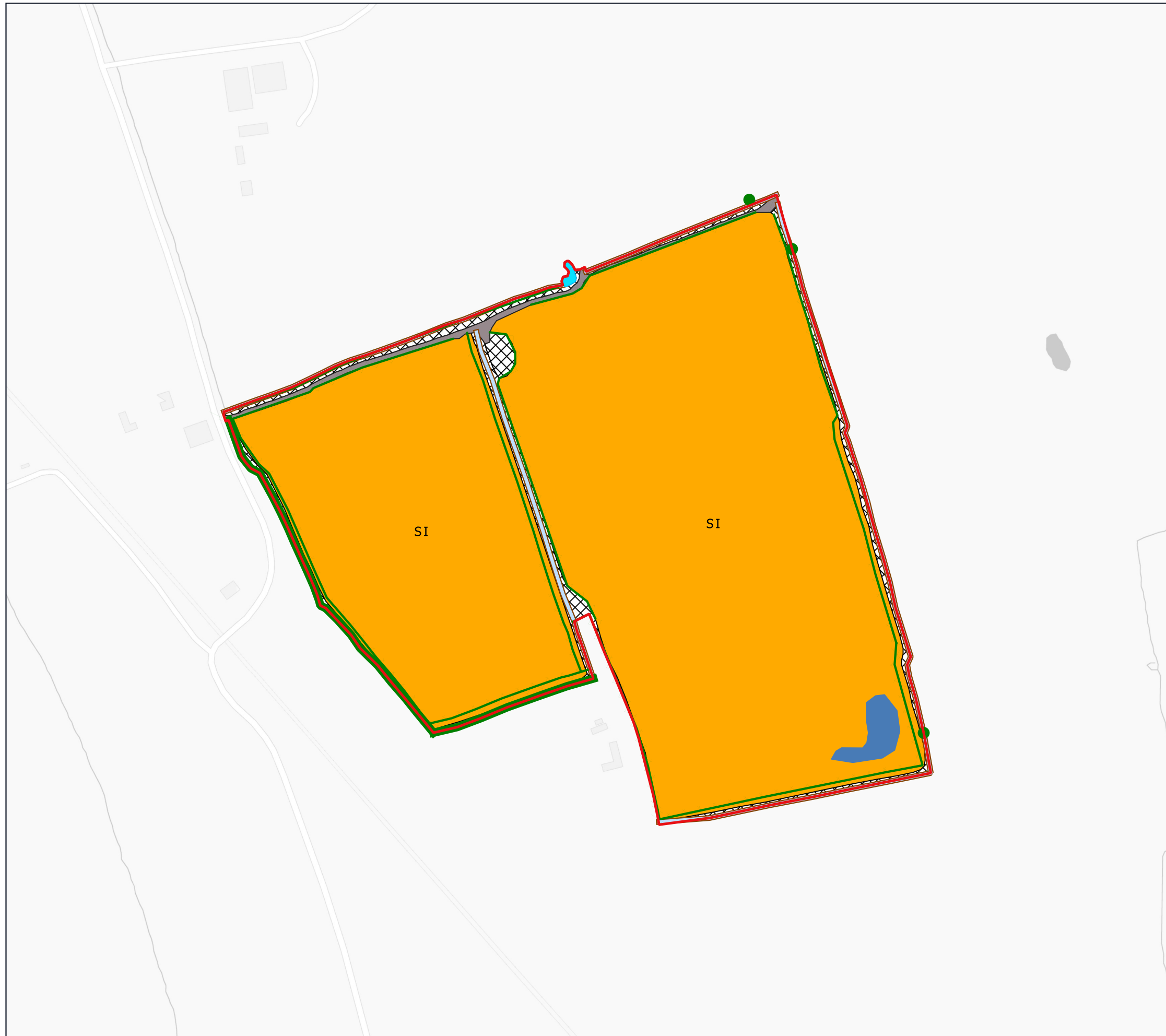
 Pond



Project	Land at J10 / M40
Drawing Title	Offsite Baseline Habitat Features Plan (Piddington Site)
Scale	As Shown (Approximate)
Drawing No.	14047/P11b
Date	March 2022
Checked	JW/AP/JA



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## Legend

Red line boundary

## Habitat Features

SI Semi-improved neutral grassland - created

Hardstanding - retained

Ruderal - retained

Native Hedgerow - retained

Native Hedgerow with wet ditch - retained

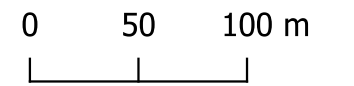
New Hedgerow - planted

Wet Ditch - retained

Created Pond

Existing Pond

Scattered trees - retained



Project	Land at J10/M40
Drawing Title	Piddington Site Post Intervention Habitat Features Plan
Scale	As Shown (Approximate)
Drawing No.	14047/P12a
Date	March 2022
Checked	JW/AP/JA



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