

1.0 INTRODUCTION

- 1.1 This note has been produced by FPCR Environment and Design Ltd. on behalf of Lagan Homes. It details the results of a Biodiversity Net Gain Assessment carried out for Land West of Ratby, Leicestershire using the Defra Biodiversity Metric 3.1 (current at the time of survey), in support of discharging Condition 2 of application 22/00648/OUT.
- 1.2 The site is approximately 4.7ha in size and is formed of two arable field compartments bound and divided by hedgerows. The site borders willow *Salix sp.* plantation to the west and broadleaved plantation woodland to the northwest, with ancient woodland present to the north of the site on the opposite side of Markfield Road. Construction of residential development is present immediately to the east with the wider area to the south and west comprising large arable fields, grassland, pasture and woodland.

2.0 BIODIVERSITY NET GAIN

- 2.1 Biodiversity Net Gain (BNG) is “an approach to development that leaves biodiversity in a better state than before”. When applying biodiversity net gain principles, developers are encouraged to bring forward schemes that provide an overall increase in natural habitat and ecological features. The aim of BNG is to minimise losses of biodiversity and help to restore ecological networks.
- 2.2 BNG is an integral part of the National Planning Policy Framework (e.g. NPPF, Para 180(d) and Para 185 (b)) although it does not specify a number/percentage for the gain.
- 2.3 In England, Biodiversity Net Gain is now required under statutory frameworks introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021), which became mandatory on the 12th February 2024 and requires all developments to provide a 10% Net Gain. It should be noted, however, that this does not apply to the above site as the application was submitted prior to the implementation of mandatory BNG. As such, the only requirement is to provide a gain in line with the NPPF. The DEFRA 3.1 Metric has been used (current at the time of the habitat survey and application).
- 2.4 Natural England’s published biodiversity net gain metric is an MS Excel spreadsheet that is used to quantify the predicted net-change in biodiversity value (“biodiversity units”) of a proposed development site before and after development. It treats the flat “habitats” and linear features “hedgerows” separately, and is based on pre-determined values, along with published written guidance, set by a Natural England-led team of experts.
- 2.5 The on-site baseline biodiversity value has been calculated based on FPCR’s walkover of the site carried out in April 2022. The proposed biodiversity value has been calculated through close collaboration with Landscape Architects at FPCR and based on the Detailed POS Planting Plan (drawing ref: 10783-L-0009).
- 2.6 Calculations make use of the Biodiversity Metric Tool provided by DEFRA - Biodiversity Metric 3.1 Calculation Tool and all measurements are taken from georeferenced GIS mapping for assessment of existing on-site habitats.

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3.0 BIODIVERSITY NET GAIN BASELINE

Calculation – Habitat & Hedgerow Units

- 3.1 Baseline habitats and hedgerows are depicted on Figure 1, with their associated condition/distinctiveness provided within Table 1 below. The metric valued the baseline habitats at 11.39 biodiversity units (BU) and hedgerow habitats at 6.79 BU.

Table 1: Baseline Habitats/Hedgerows

Habitat type	Area (hectares)	Distinctiveness	Condition	Biodiversity Units
Cereal crops	5.1996	Low	Condition Assessment N/A	10.40
Modified grassland	0.2196	Low	Moderate	0.88
Vacant/derelict land/ bare ground	0.0551	Low	Poor	0.11
Hedgerow Type	Length (Km)	Distinctiveness	Condition	Biodiversity Units
Native Hedgerow	0.706	Low	Good	4.24
Native Species Rich Hedgerow	0.213	Medium	Good	2.56

Analysis – Baseline Habitat & Mitigation Hierarchy

- 3.2 Full descriptions of the habitats can be found in the Ecological Appraisal² for the Site. The site comprised arable fields containing cereal crops with small areas of modified grassland and vacant/derelict land/bare ground. These habitats are of low distinctiveness and are considered to be of low ecological value. The loss of these habitats can be mitigated for through newly created habitats within the green infrastructure of the site.

4.0 SITE PROPOSALS & POST-DEVELOPMENT BNG DELIVERY

Calculation – Habitat & Hedgerow Units

- 4.1 Hedgerow Retention is shown on Figure 2. Proposed habitats are shown on Figure 3, with habitat creation summarised in Table 2 below. Figure 4 shows the Proposed Habitat Condition and Distinctiveness.

Table 2: Created Habitats/Hedgerows

Habitat type	Area (hectares)	Distinctiveness	Condition	Biodiversity Units
Modified grassland	0.4304	Low	Poor	0.83
Other neutral grassland	1.7907	Medium	Moderate	11.99
Other neutral grassland (mown pathway)	0.0813	Medium	Poor	0.30
Mixed scrub	0.1776	Medium	Poor	0.69
Built linear features	0.7686	V.Low	N/A - Other	0.00
Developed land; sealed surface	0.9731	V.Low	N/A - Other	0.00
Introduced shrub	0.0626	Low	Condition Assessment N/A	0.12
Sustainable urban drainage feature	0.2353	Low	Moderate	0.57

² Ecological Appraisal – Land West of Ratby, FPCR, June 2022

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Vegetated garden	0.5979	Low	Condition Assessment N/A	1.15
Other woodland; broadleaved	0.3568	Medium	Poor	1.19
Urban Tree	0.175	Medium	Poor	0.49
Hedgerow Type	Length (Km)	Distinctiveness	Condition	Biodiversity Units
Native Hedgerow	0.029	Low	Good	0.11
Native Species Rich Hedgerow	0.176	Medium	Good	1.38
Native Species Rich Hedgerow with Trees	0.048	High	Good	0.42
Hedge Ornamental Non-Native	0.173	V. Low	Poor	0.17

Target Conditions and Management

- 4.2 Built linear features and developed land are deemed by the metric to provide no biodiversity value, while the modified grassland, scrub, urban trees and woodland have been targeted to poor condition. The other neutral grassland and Sustainable Urban Drainage feature (SUDs) have been targeted to moderate condition, with management recommendations to achieve this condition provided below:

Other Neutral Grassland

- 4.3 The proposed species rich meadow will be seeded with Naturescape N1 'General Purpose Meadow Mixture' or similar. Management should focus on maximising biodiversity by employing the following measures:

- Post sowing (first growing season) any flush of annual weeds should be controlled by mowing regularly and removing the clippings.
- Following establishment, management will be reduced to create a varied sward height, following the suppliers' specifications with one cut per year.
- Undesirable ruderal species such as docks and thistles should be spot treated.
- Any areas of failed establishment should be reseeded.
- The grassland should be inspected annually for bracken, bramble, or scrub development, which should be removed as necessary.

SUDs

The Sustainable Urban Drainage feature will be seeded with a wetland grass mix such as Naturescape N7G. Management should focus on maximising biodiversity by employing the following measures:

- Areas of failed establishment should be reseeded/ replanted.
- The basin should be inspected annually for bracken, bramble, or scrub development, which should be removed as necessary.
- The basin should be maintained free of non-native or invasive species.
- A varied vegetation structure should be maintained, ensuring a single ecotone does not account for more than 80% of the total area.

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5.0 BIODIVERSITY NET GAIN OUTCOME & CONCLUSIONS

- 5.1 The metric indicates proposals have the potential to deliver 17.33 Habitat Units and 7.54 Hedgerow Units. Based on the above categorisations and inferences about likely target conditions for created area habitats, it is considered feasible that the scheme can deliver a net gain in the region of +52.21% (+5.95 Habitat Units), as summarise in Table 3.
- 5.2 The current proposal indicates the retention of 483m of native hedgerow and 213m of native species rich hedgerow and the creation of 29m of native hedgerow, 176m of native species rich hedgerow, 48m of native species rich hedgerow with trees, and 173m of non-native ornamental hedgerow with conditions detailed in Table 2 above. It is considered feasible with these proposals that the scheme can deliver a net gain in the region of 10.95% (+0.74 Hedgerow Units), as summarised in Table 3.

Table 3. Site BNG Delivery

On-site baseline	Habitat units	11.39
	Hedgerow units	6.79
On-site post intervention	Habitat units	17.33
	Hedgerow units	7.54
Total net unit change	Habitat units	5.95
	Hedgerow units	0.74
Total net % change	Habitat units	52.21%
	Hedgerow units	10.95%

- 5.3 The development is required to provide 20% National Forestry contribution, as per the National Forest Guide for Developers & Planners (as referenced in Policy 21 of the Hinkley and Bosworth Local Plan). This can include the provision of new woodland planting and forestry related green infrastructure. The proposed option will more than meet this requirement, providing approximately 2.9ha of greenspace which includes 0.36ha of new woodland planting in addition to scrub and meadow grassland.

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Key

Site Boundary

Habitats Baseline

Cereal crops

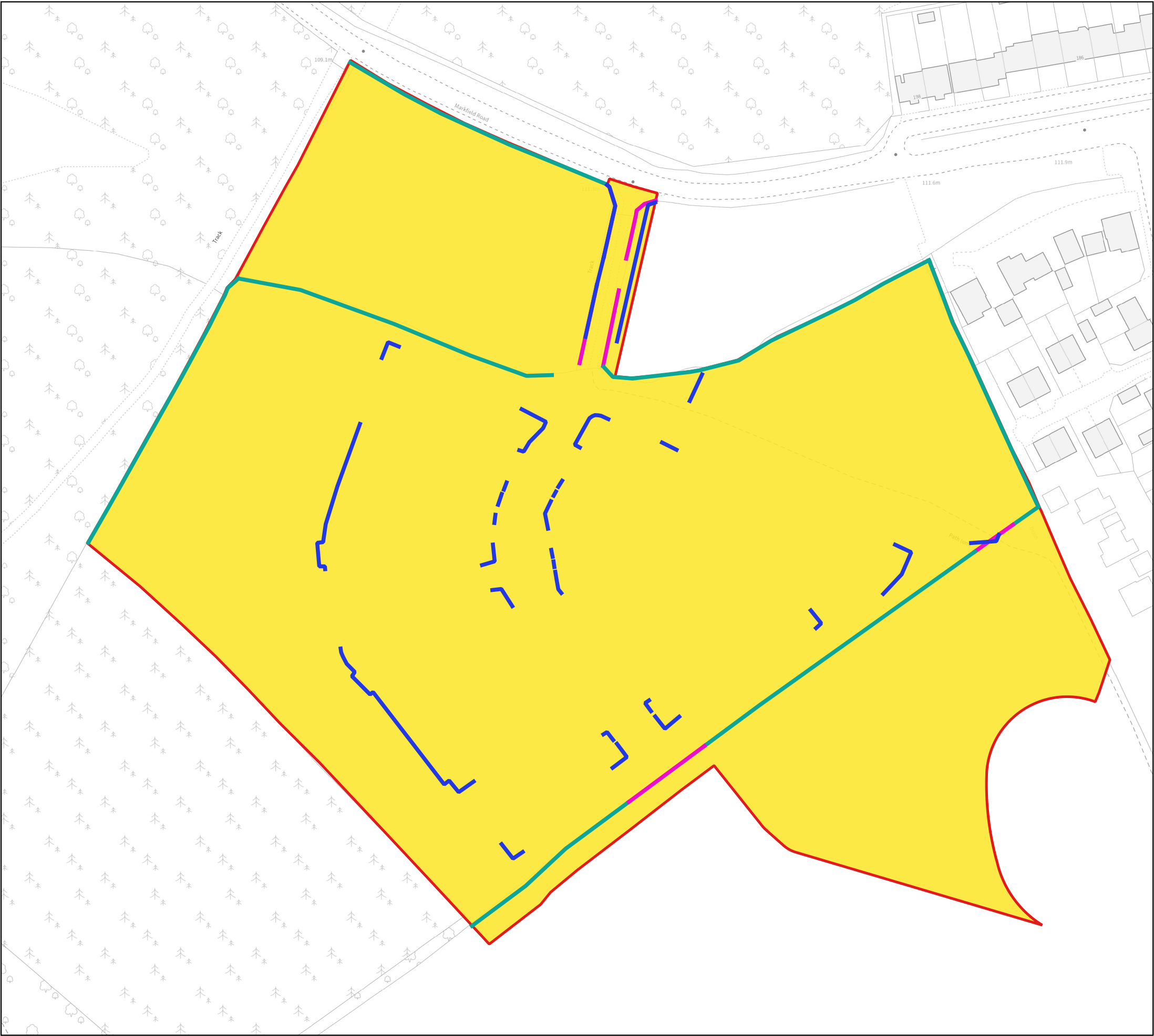
Modified grassland

Vacant/derelict land/ bareground

Hedgerow Baseline

Native Hedgerow (h2NE5)

Native Species Rich Hedgerow (h2NE2)



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Key

Habitat Retention

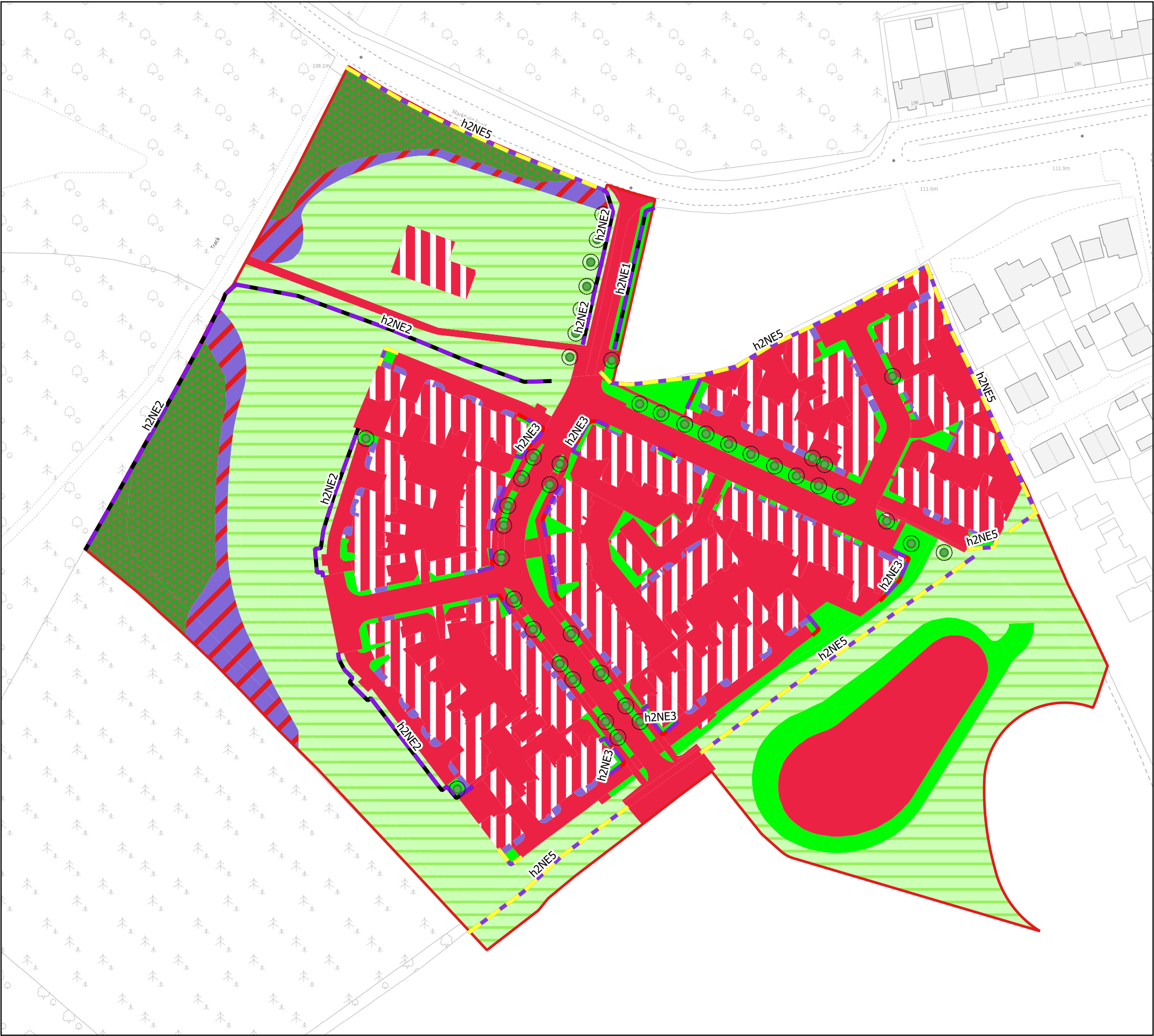
■ Lost

Hedgerow Retention

— Created

— Retained

— Lost



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Key

Site Boundary

Habitats Proposed

Built linear features

Developed land; sealed surface

Introduced shrub

Mixed scrub

Modified grassland

Other neutral grassland

Other woodland; broadleaved

Sustainable urban drainage feature

Vegetated garden

Hedgerows Proposed

Hedge Ornamental Non Native (h2NE3)

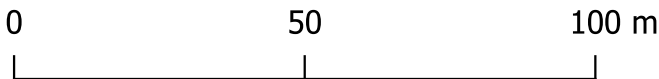
Native Hedgerow (h2NE5)

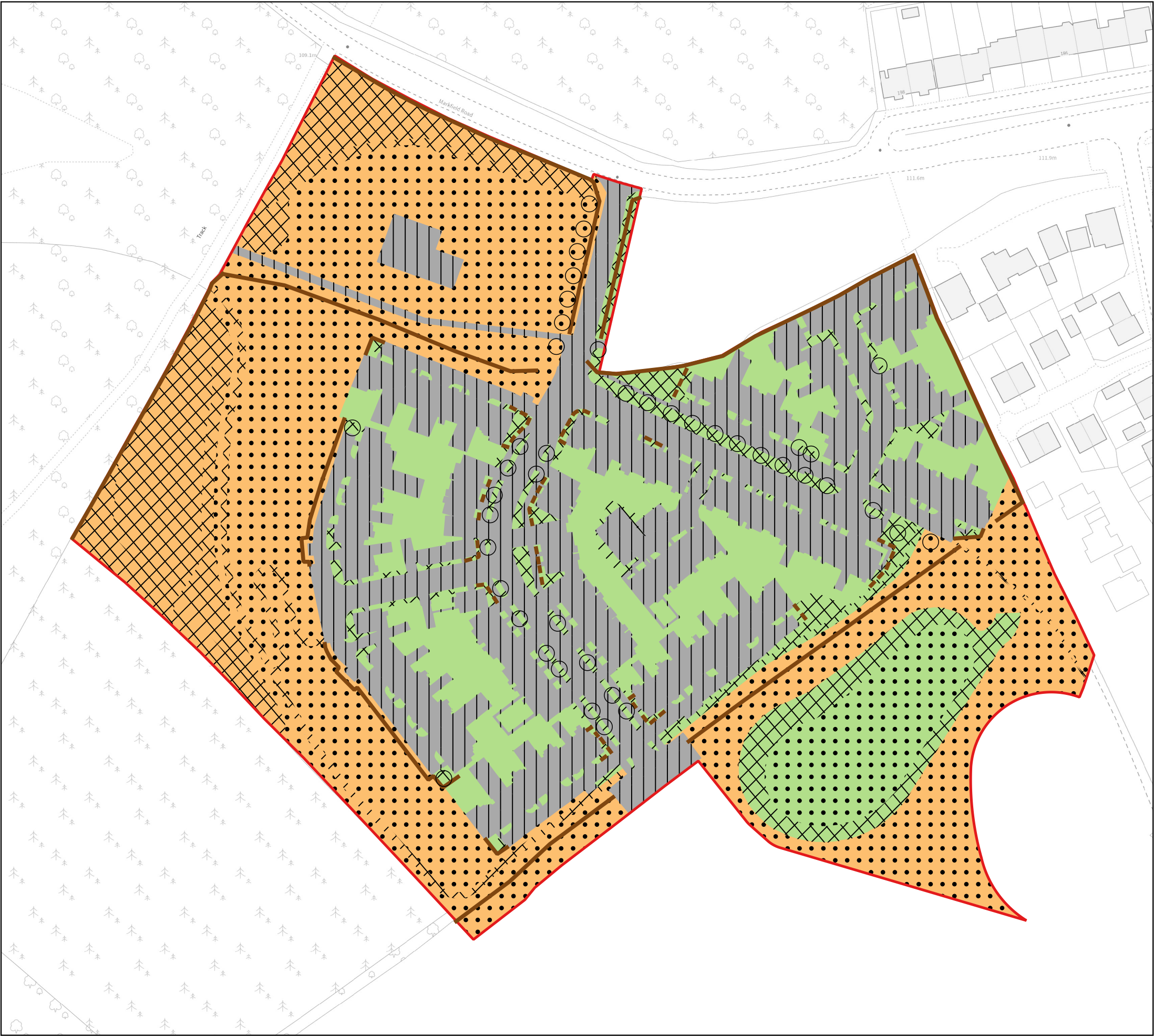
Native Species Rich Hedgerow (h2NE2)

Native Species Rich Hedgerow with trees (h2NE1)

Urban Trees Proposed

Proposed Small





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Key

Site Boundary

Proposed Habitats Distinctiveness

Medium

Low

V.Low

Proposed Habitats Condition

Moderate

Poor

N/A - Other

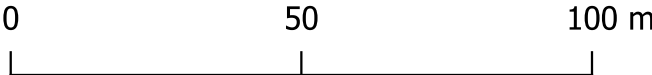
Proposed Hedgerow Condition

Good

Poor

Proposed Urban Trees Condition

Poor



client
Marrons Planning
project
Phase 2 Land West of Ratby,
Leicestershire
drawing title
Proposed Habitat Condition / Distinctiveness

scale @ A3
1:1,300
drawn
RAM
issue date
23/4/2024
Figure 4