

Town and Country Planning Act 1990 – Section 78 Town and County Planning
(Development Management Procedure) (England) Order 2015 Town and
Country Planning (Inquiries Procedure) (England) Rules 2002

Appeal by NRS Aggregates Ltd

Land at Lea Castle Farm, Wolverley Road, Broadwaters, Kidderminster,
Worcestershire

Against the refusal of planning permission by Worcestershire County Council for
application 19/000053/CM

“Proposed sand and gravel quarry with progressive restoration using site
derived and imported inert material to agricultural parkland, public access and
nature enhancement”

Appeal Ref. APP/E1855/W/22/3310099

Updated Ecological Assessment

October 2024



ECOLOGY UPDATE

1 Introduction

- 1.1 This ecology update records the results of an updated UK Habs Survey of the site which was conducted on the 6th September 2024. Any evidence of protected, notable or invasive non-native species and the suitability of the site to hold such species was also assessed as part of this walkover. Findings of the walkover survey were used to determine if any material change to the site had occurred since the Preliminary Ecological Appraisal (PEA) completed during 2019 or the Habitat Condition Assessment, conducted as part of the Biodiversity Metric submitted in 2023. Additionally, the updated habitat survey was used to inform if there was any likely change in the occurrence, population size or distribution of protected/priority species since 2019. If it was considered that there was potential for material change in protected/priority species onsite this could impact upon the determinations set out in the Ecological Impact Assessment (EclA).
- 1.2 This Update and its terminology are in accordance with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland (V1.2 CIEEM 2022).
- 1.3 This Update (and its associated figures and appendices) is not intended to be a standalone document and should be read in conjunction with the 2019 EclA and the 2019 Preliminary Ecological Appraisal.
- 1.4 Additional relevant information to the determination of the schemes ecological impacts is provided in the attached Appendices.
- 1.5 A UK Habs Habitat baseline map is provided in Appendix A.
- 1.6 Updated site photographs are provided within this report.
- 1.7 This Update also summarises the results of a revised Biodiversity Metric Calculation which is provided separately.
- 1.8 The updated metric has been undertaken utilising the latest Biodiversity Metric (Statutory Biodiversity Metric). The Statutory Metric was published in November 2023.
- 1.9 This Update confirms the current baseline ecological conditions on site, and within its surrounding, remains broadly as described within the 2019 EclA.
- 1.10 This Update concludes that the assessments 'of the likely significant effects' (detailed with the 2019 EclA) remain correct, and the ecological evidence underpinning these

determinations should still be viewed as robust. This Update demonstrates the schemes continued conformity with all relevant ecological policy and legislation.

- 1.11 For the avoidance of doubt, the proposed amendments to the scheme as set out in the Revised Statement of Common Ground signed on 13.09.2024 do not change the ecological issues considered in the EclA or this update.

2 Baseline Conditions

2.1 Habitats

2.1.1 A walkover Survey was conducted on the 6th of September 2024, by Director of Ecology Rhia McBain (BSc Hons). The updated habitats recorded are mapped and referenced within this report. The walkover was focused on assessing the habitats on site and following the UKHabs survey techniques to allow the BNG metrics to be updated for the site.

2.1.2 Whilst some habitats on site had changed, the main arable fields remained largely unchanged. One of the modified grassland parcels had transitioned into a poor condition, other neutral grassland, and some of the ruderal habitats had become bramble scrub. None of the further survey data elevated or reduced the previous assessment in respect of importance of ecological features with regards to species but the habitats had in some areas become a slightly higher ecological value. The 2019 EclA impact assessment is still considered to be appropriate for species and habitats based on the mitigation and up to date BNG calculations.

2.1.3 The habitats present across the site are summarized below.

- Arable – cereal crops
- Modified grassland
- Other neutral grassland
- Grassland – bracken
- Sparsely vegetated land – ruderal/ephemeral
- Other neutral grassland - – tall forbs
- Bramble scrub
- Native hedgerow
- Developed land sealed surface
- Bare ground
- Individual trees - rural trees
- Individual trees - veteran
- Other woodland; broadleaved
- Other woodland; mixed

2.2 Arable

- 2.2.1 The site primarily comprised of arable fields. At the time of the survey, the fields were a mix of fallowed areas and crops not yet harvested with one area of the northeastern field appearing to be under a temporary grass ley rotation.
- 2.2.2 The previous assessment of arable land as 'important at the site level only' remains appropriate.



Figure 2-1 Arable crop

2.3 Other Neutral Grassland

- 2.3.1 Other neutral grassland formed a field to the south the site. False oat grass (*Arrhenatherum elatius*) and common bent (*Agrostis capillaris*) were dominant with cock's foot (*Dactylis glomerata*) and Yorkshire Fog (*Holcus lanatus*), crested dog's tail (*Cynosurus cristatus*) and timothy (*Phleum pratense*) were occasional to frequent.
- 2.3.2 This habitat was considered 'important at the site level only'.



Figure 2-2 Other neutral grassland

2.4 Modified grassland

- 2.4.1 Two modified grassland fields were present on the southern part of the site. The fields were separated by a farmers track (bare ground). The grassland had limited vegetative species diversity being dominated by Perennial rye grass (*Lolium perenne*). The area was intensively grazed by cattle resulting in a generally short sward height (approx. 50mm) throughout. The grassland showed evidence of nutrient enrichment.
- 2.4.2 The previous assessment of what, under the phase 1, is listed as improved grassland, as 'important at the site level only' remains appropriate.



Figure 2-3 Modified grassland

2.5 Bracken

- 2.5.1 An area of bracken was present along part of the southern site boundary, adjacent to a brick wall. The area was dense in nature and was approximately 3m in width.
- 2.5.2 The area of bracken was considered of negligible importance.



Figure 2-4 Bracken

2.6 Other neutral grassland - Tall forbs

- 2.6.1 There was an area of arable margin to the west of the site which had been left unmanaged and had developed into a tall ruderal/tall forb area with nettle, creeping thistle and willowherb dominant.
- 2.6.2 This was assessed as being important at site level only in 2024. Under the previous grassland habitat in the initial survey, it was also assessed as important at site level.



Figure 2-5 Tall ruderal

2.7 Bramble scrub

- 2.7.1 There were areas of bramble scrub which had transitioned from tall ruderal vegetation and grassland arable margins since the original assessment.
- 2.7.2 The bramble scrub, to the south of the site was dominated by dense bramble growth with Buddleia (*Buddleja davidii*) and willow scrub (*Salix sp.*) also being present.
- 2.7.3 This was assessed as being important at site level only in 2024. Under tall ruderal in the original survey, it was also assessed as important at site level.



Figure 2-6 Bramble scrub

2.8 Native hedgerow

- 2.8.1 Additional native/species poor hedgerows were identified on site during the 2024 survey efforts. The hedgerows on site were gappy with a large amount of standing dead wood present in the two eastern hedgerows, this appeared to be due to Dutch elm disease. The hedgerows were 1-2m in height with a width of between 1.5m to 2m. The hedgerows appeared to be subject to infrequent management, with frequent and large gaps along its length. Its woody vegetation was dominated by hawthorn (*Crataegus monogyna*) with elm (*Ulmus procera*) present but occasional and in one of the hedgerows elder (*Sambucus nigra*) was also occasional.
- 2.8.2 The previous assessment of hedgerows as 'important at the site level only' remains appropriate.



Figure 2-7 Native hedgerow

2.9 Individual, rural trees

- 2.9.1 There were a number of mature and semi-mature scattered trees recorded across the site including oak (*Quercus robur*), Beech (*Fagus sylvatica*), Sweet chestnut (*Castanea sativa*), Lime (*Tilia sp.*), Redwood (*Sequoia sp.*) and Conifers.
- 2.9.2 Several mature trees displayed ecologically desirable characteristics, including broken / split limbs, woodpecker holes, hollow interiors, standing deadwood etc. This allows for the trees to support a greater range of protected and priority fauna species (i.e., bats, birds, invertebrates).
- 2.9.3 Due to their features these trees are to be considered to be in 'good' condition to support biodiversity.
- 2.9.4 The semi-mature trees lacked the desirable ecological features of the mature trees. However, they are still considered to potentially support a range of species. As such, these trees are considered to be in 'moderate' condition.
- 2.9.5 The previous assessment of the semi-mature trees being 'important at the site level only' remains appropriate following the 2024 assessment.
- 2.9.6 The majority of the mature trees on site are due to be retained throughout works.
- 2.9.7 The mature trees are considered to be 'important at a local (borough) level'. This remains accurate in the 2024 assessments.



Figure 2-8 Rural trees

2.10 Hard standing and bare ground

- 2.10.1 There was a hard standing track present towards the centre of the site that separated the eastern and western sides.
- 2.10.2 An area of hard standing also occurs to the south of the site and was frequently in use for storing materials, machinery, and stockpiling.
- 2.10.3 There were a number of bare ground tracks used for access across the site.
- 2.10.4 The hard standing and bare ground were assessed as being of negligible importance.

2.11 Woodland

- 2.11.1 Two areas of woodland were still present within the site boundary.
- 2.11.2 An area of broadleaved woodland occurred adjacent the sites northwestern boundary and an area of plantation woodland was present along the southwestern boundary.
- 2.11.3 For both woodlands the habitat descriptions and species compositions remain consistent with those detailed within the 2019 PEA.
- 2.11.4 The mixed woodland to the south contains stands of cherry laurel (*Prunus laurocerasus*), it is recommended that this species is removed as part of the restoration of the site.
- 2.11.5 In line with previous determinations, within the 2019 EclA, both areas of woodland are considered to be of Local importance (borough level).
- 2.11.6 The intention remains that both areas of woodland are retained.

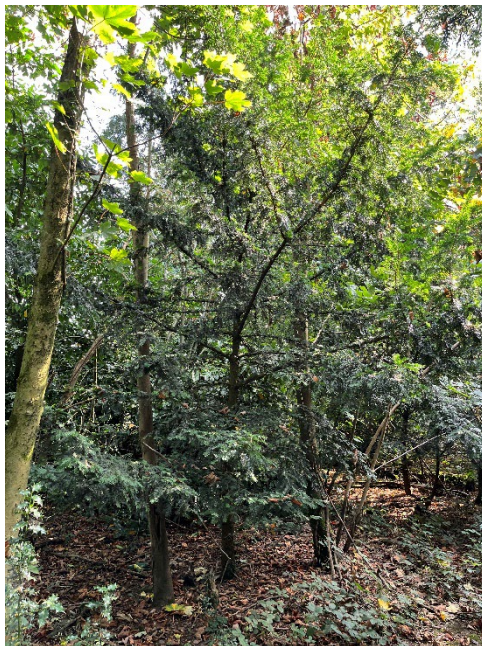


Figure 2-9 Mixed woodland

2.12 Veteran trees (irreplaceable habitats)

- 2.12.1 Two veteran trees were identified on site, these are confirmed within the arb report (ES Volume 2, technical appendix C- arboriculture). Both trees are set to be retained with a suitable Root Protection Area (RPA) as per BS 5837 Tree Schedule in Appendix 1 of the arb report.
- 2.12.2 The trees to be retained including those veteran trees will be demarcated at the appropriate RPA and protected at all times during works with fencing in accordance with the requirements of BS5837:2012



Figure 2-10 Veteran trees

2.13 Invasive Non-Native Species

- 2.13.1 Himalayan balsam (*Impatiens glandulifera*) was identified in the 2024 walkover, see plan below showing location. It is recommended that this is treated appropriately as part of the initial works on site.

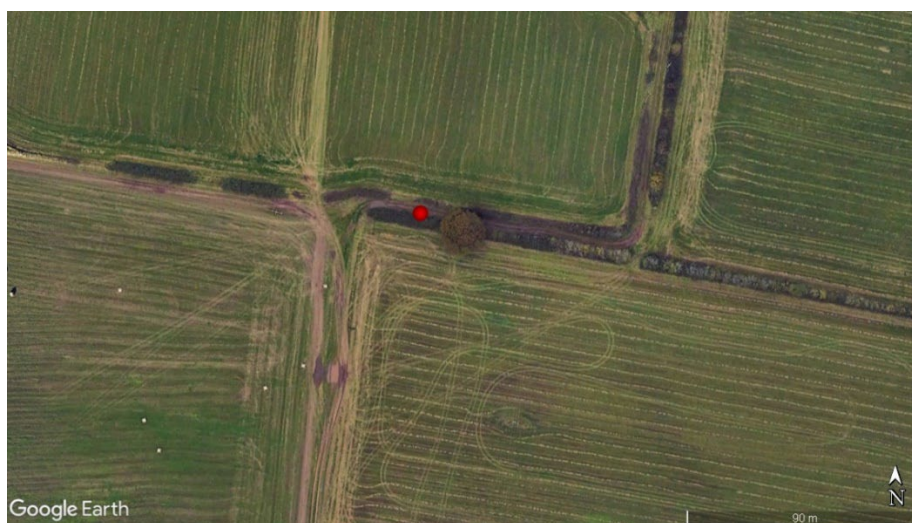


Figure 2-11 Location of Himalayan balsam

3 Biodiversity Impacts

3.1 Likely Significant Effects (Fauna)

3.1.1 With the context of the 2019 EclA, an effect is considered to be potentially significant upon a species if it could result in a change to its conservation status or the degree of integrity of any important ecological feature.

3.1.2 There is not considered to be any material change in the habitats currently on site or to the habitats proposed to be created/restored as part of the restoration scheme. As the habitats and ecological features on site have not materially altered, it is considered unlikely that the presence and abundance of protected and priority species has changed (either in their type or distribution) from that determined during previously undertaken surveys (2019 and 2020). Key species are discussed below with regard to their previous impact assessment and if that still holds as appropriate.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

- █ [REDACTED]
- █ [REDACTED]
- █ [REDACTED]
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- █ [REDACTED]

█ [REDACTED]

Bats (roosting and foraging/commuting)

3.1.9 The assessment, as per the EclA, remains valid that with post licencing and associated mitigation the impact is assessed as Negligible and not significant for both roosting and foraging/commuting bats as most of the connectivity for foraging/commuting is being retained wherever possible. Provided the lighting mitigation specified in the EclA is followed and light spill onto on site and adjacent hedgerows, tree lines and woodland are all avoided, there should be no significant impact.

Amphibians and Reptiles- including great crested newt (GCN)

3.1.10 The assessment, as per the EclA, remains valid with regard to GCN and reptiles being likely absent from site based on the regular disturbance and the lack of significant changes to habitats since the surveys were undertaken. Other amphibians are also considered likely to be absent from site based on the habitats available. The EclA impact of negligible and not significant stands due to the phased approach and increase in suitable habitat and connectivity post restoration.

Invertebrates

3.1.11 A southern hawker (*Aeshna cyanea*) was seen on the main access track towards the south of the site during the survey in 2024. The site holds value for invertebrates, however the mitigation and compensation as per the EclA is still valid and the impact remains negligible and not significant.

Birds

3.1.12 The overall habitats on site remain largely unchanged and the birds on site during the survey were not significantly different to the previous ecological reports. Therefore, the assessment within the 2019 EclA remains valid, with mitigation and enhancement measures, the impact is deemed to be negligible and not significant for both wintering and breeding birds.

3.2 Biodiversity Net Gain & Ecological Enhancement

3.2.1 An updated quantitative assessment of biodiversity impacts was undertaken using the Statutory Biodiversity Metric (Appendix C). This determined the sites 'Baseline Score' as being 110.56 Biodiversity Units (BU) for habitats, and 1.72 Hedgerow units. These values were calculated based upon the updated UK Habs and habitat condition assessment completed in September 2024.

3.2.2 Once the existing habitat baseline is determined, the metric quantifies the likely biodiversity net gain/loss for the proposed scheme's delivery based upon its indicative layout and the restoration and ecological mitigation measures proposed. The Statutory Metric allows for the habitats on site (both current and future planned) to be described in terms of distinctiveness, condition and strategic significance.

3.2.3 Delay factors relating to the commencement of future habitat creation/restoration/enhancement can also be imputed as variables within the metric as these can also have a material effect on predicted future net-biodiversity values on site. This is particularly relevant for this scheme, as the phasing plans allow for significant temporal variation in the likely commencement date of different areas of proposed habitat creation/restoration/enhancement.

3.2.4 The outputs of the updated Biodiversity Metric are summarised below:

HABITATS:

- Existing Baseline = 110.96 Biodiversity Units
- On-site Post-Intervention = 193.24 Biodiversity Units
- Total Net Unit Change (B-A) = +82.28 Gain of Biodiversity Units

HEDGEROWS:

- Existing Baseline = 1.72 Hedgerow units
- On-site Post-Intervention = 6.88 Hedgerow Units
- Total Net Unit Change (B-A) = +5.16 Gain of Hedgerow Units

3.2.5 The Biodiversity Metric demonstrates the proposed scheme will deliver a likely substantial net gain for biodiversity of **+74.16% BU** for habitats, and **+300.93% HU** for hedgerows. Figure 3-1 below shows the results of the metric for the site pre-development and post full restoration.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	82.28
	<i>Hedgerow units</i>	5.16
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	74.16%
	<i>Hedgerow units</i>	300.93%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Figure 3-1 BNG pre development - post full restoration results.

3.2.6 This significant 'likely' net gain is due to areas of low distinctiveness arable land, modified grassland, scrub and tall forbs being replaced by high distinctiveness acid grassland, woodland, waterbodies and the planting of scattered trees.

3.2.7 The Statutory Metric has also been used to create separate BNG assessments for each phase of the works, whilst it is not a legal or policy requirement for each stage to have a net gain, this Phased BNG allows the net gains/losses to be evaluated throughout the works. Within the BNG report different working options are discussed in relation to BNG. This includes and assessment of each phase, using the updated plans from the client as the post development assessment and also for the baseline of the next phase. For example, or Phase 1, the baseline is taken as the habitats as mapped on the initial plan (ref: 01-LEACF-INQ_004) from the client and the post development is taken as the phase 1 habitat plan (ref: 01-LEACF-INQ_005) from the client which means that each phase post development currently assumes the area of quarry on the plan for that phase is still active and not yet restored post development to give a worst-case scenario.

3.2.8 Existing ecological functionality will be maintained at the site via the retention of the hedgerow and woodland networks and further enhanced through new hedgerow planting and the creation of additional woodland areas and scattered trees.

3.2.9 The two veteran trees that form irreplaceable habitats have been retained and RPA protection will be implemented at all times during works including restoration and ecological enhancement works. The client has also designed the scheme so that some

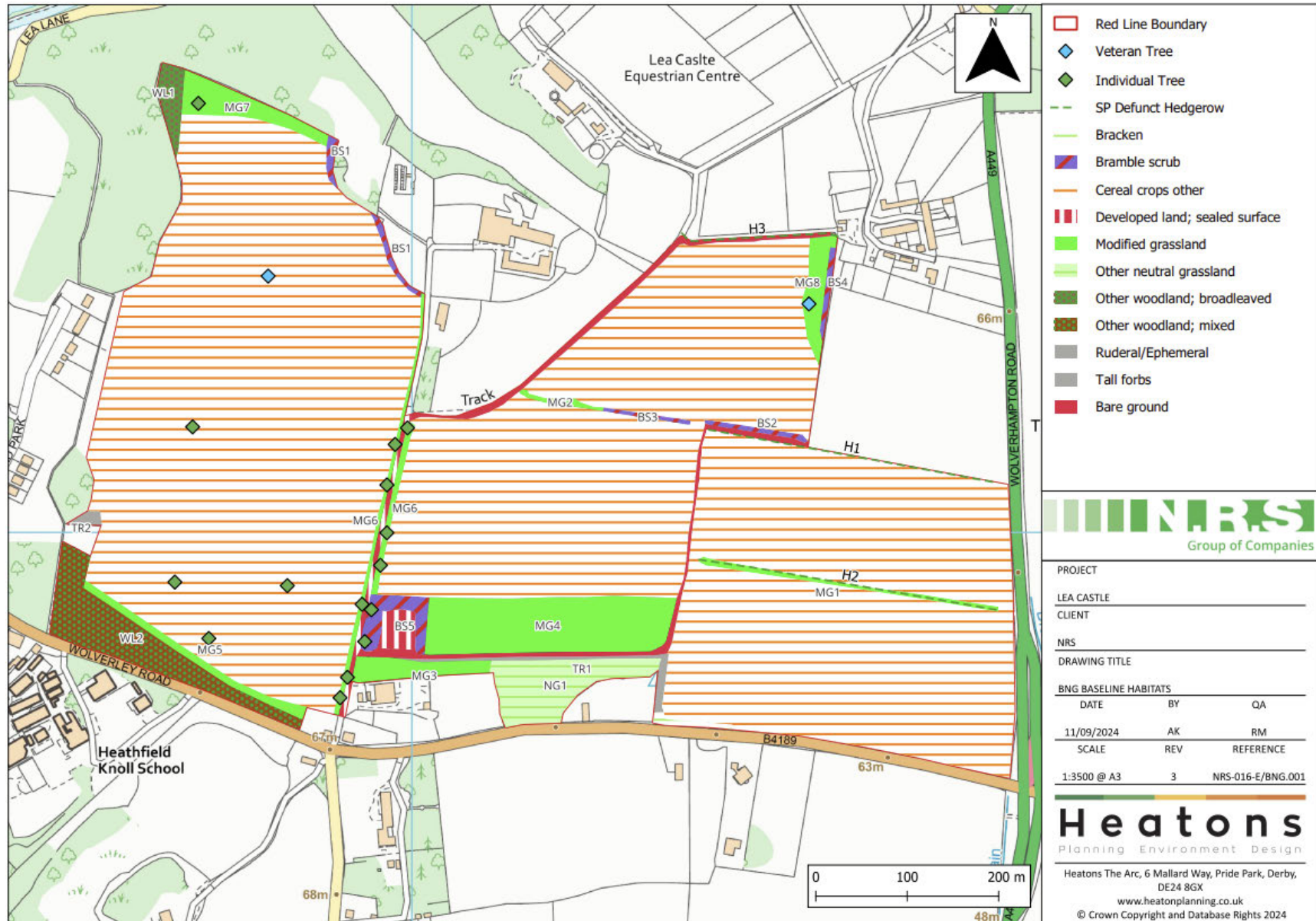
planting will occur 2 years in advance giving wider connectivity and habitats availability across the site (see initial works plan ref: 01-LEACF-INQ-004).

- 3.2.10 These measures will ensure that there is wider landscape habitat connectivity and that suitable habitat resources are available for protected species (bats, birds, small mammals, invertebrates, herpetofauna, etc.) throughout each phase of works.
- 3.2.11 The phased nature of the development will limit the total duration of works/disturbance within each section of the site allowing for the restoration habitats (in one location or another) to occur continuously after the completion of the first phase. Meaning that the combined adverse impacts upon mobile site fauna is likely to be reduced as areas of refuge are always available.
- 3.2.12 The conclusions of the 2019 EclA are deemed to still be valid in that the scheme should deliver a significant long-term gain in site biodiversity value.

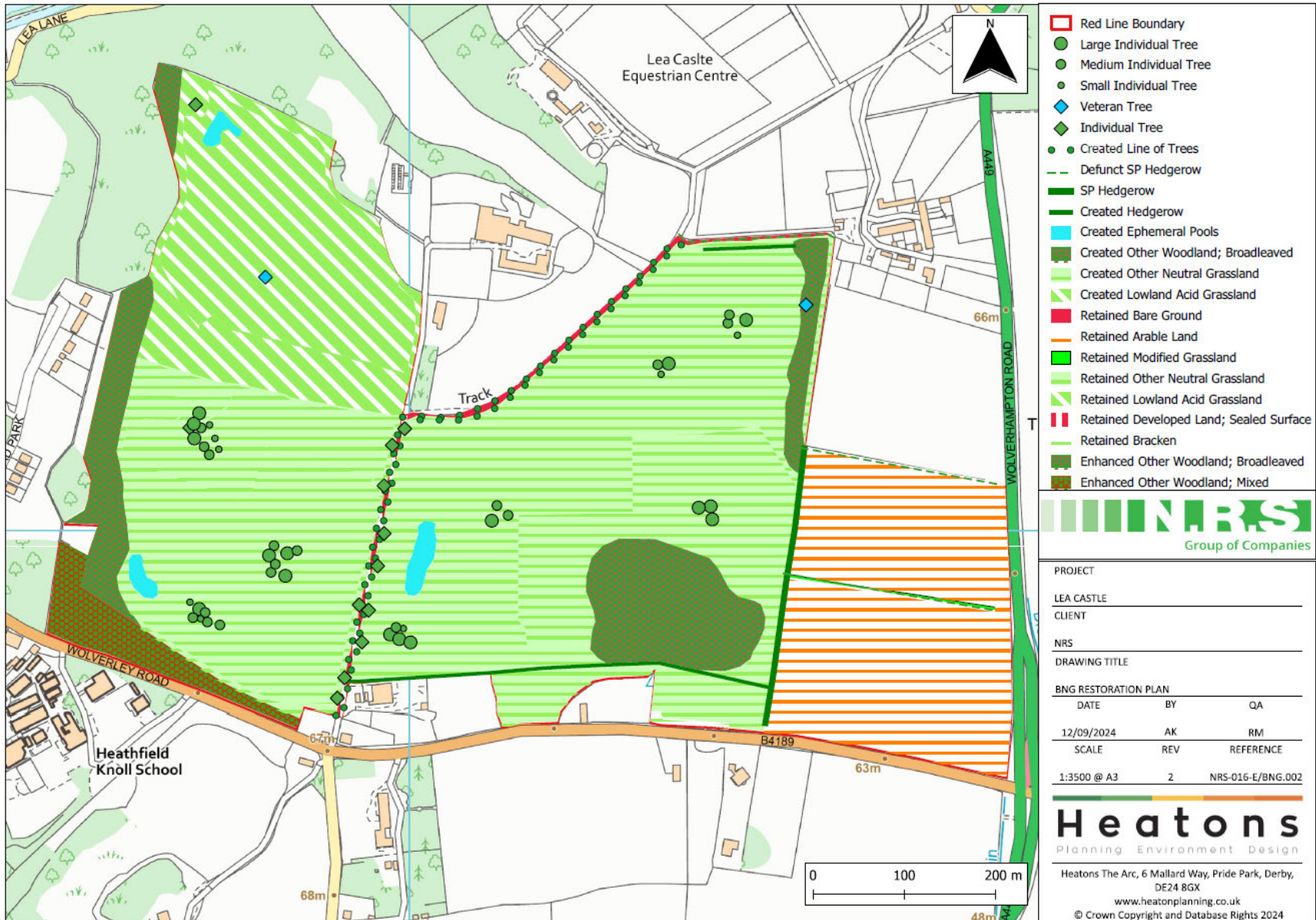
4 Conclusion

- 4.1.1 This Update demonstrates that the conclusions detailed within the previous the 2019 Ecological Impact Assessment remain overall both accurate and robust with minor changes to habitats on site still suitably mitigated for due to the ecologically minded phasing and restoration designs.
- 4.1.2 The site remains materially unchanged in its importance since previous assessments and is likely to support the same species assemblages and populations as previously determined.
- 4.1.3 The significant net gains in biodiversity both with regard to habitats and the species they support exceed the applicable policy requirement (which is merely that requirement there should be positive net gains of no specified degree – para 180(d), NPPF 2023). They also exceed the legal minimum of 10% net gain that is now required for current planning applications by the Environment Act 2021, even though that requirement does not apply to this planning application.

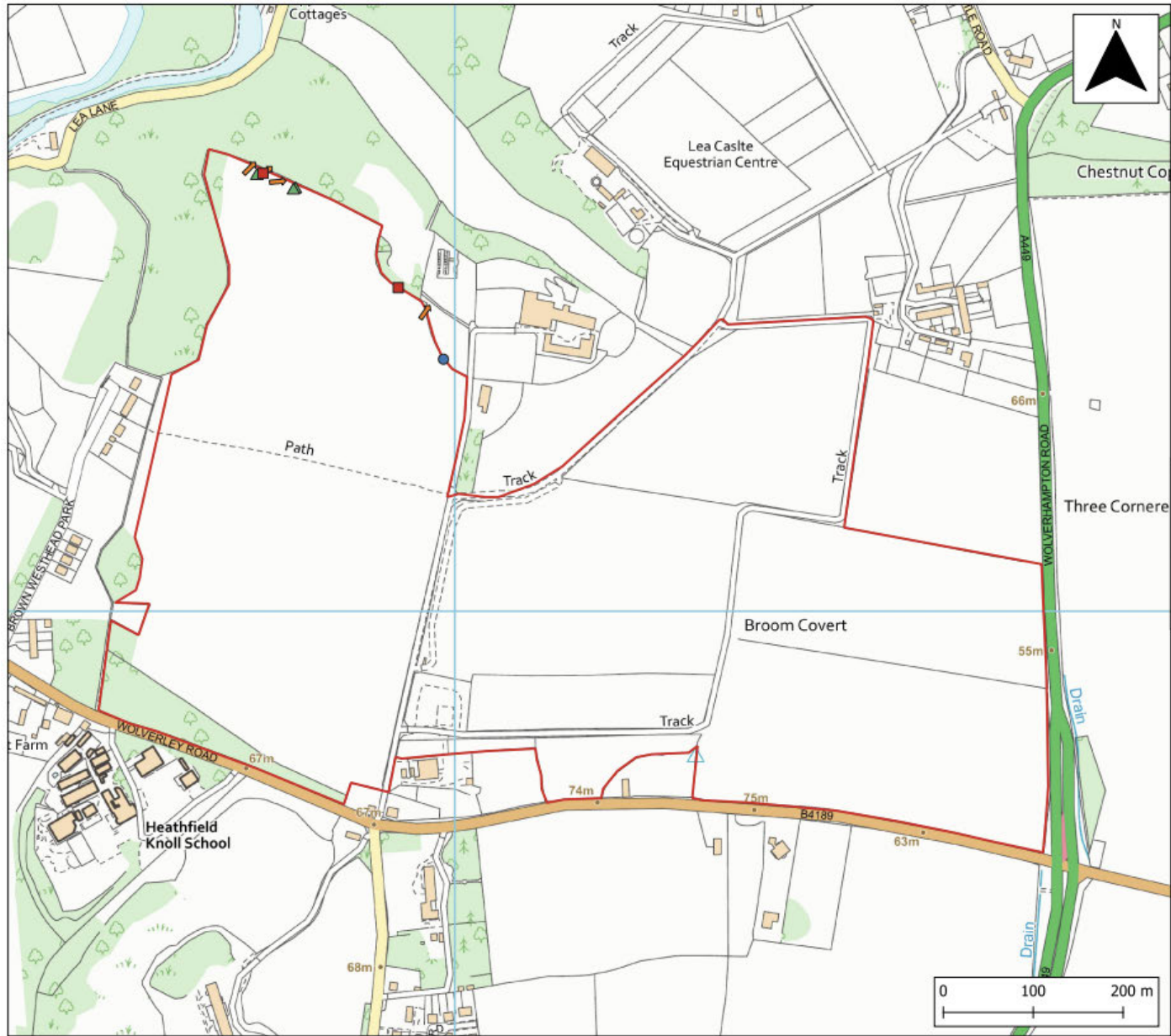
Appendix A – September 2024 UKHab Baseline Map



Appendix B – Post Restoration UKHab Map



Appendix C Badger Evidence Plan – **CONFIDENTIAL**



- Latrine
- Snuffle Holes
- ↑ Mammal Trail
- ▲ Sett Entrance Locations
- Red Line Boundary

CONFIDENTIAL: THE SETT ENTRANCES HAVE NOT BEEN MONITORED; THEREFORE, IT CANNOT BE DETERMINED EXACTLY WHICH MAMMAL SPECIES IS UTILISING THE SETTS. HOWEVER, THEY ARE INDICATIVE OF BADGERS DUE TO THEIR SIZE AND OTHER FIELD SIGNS PRESENT ONSITE SUCH AS LATRINES, PATHS AND SNUFFLE HOLES. THUS, MEANING THIS INFORMATION SHOULD NOT BE RELEASED INTO THE PUBLIC DOMAIN DUE TO THE SENSITIVE NATURE.

PROJECT
LEA CASTLE

CLIENT

NRS

DRAWING TITLE
BADGER FIELD SIGNS PLAN

DATE	BY	QA
11/09/2024	HH	RM
SCALE	REV	REFERENCE
1: 4,000 @ A3	1	NRS-016-E/BDG.001

Heatons
Planning Environment Design

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