File Note: Ecological Support: LPA Rebuttal

Site: Land Off The Common, The Common, Fritchley, Belper, Derbyshire DE4 5BW

Client: Mr James Filer

Project: Outline Planning Application for the erection of up to 17 dwellings and associated infrastructure, (Access not Reserved) (May affect the Rights of Way AVA/2023/0411

LPA: Amber Valley Borough Council

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Report Date: 10th March 2026

Background	
Background	Arbtech Consultancy Ltd were commissioned to formulate a Lowland Meadow Management Plan in response to feedback received on the above-named application.
Reviewed Documents	• Derbyshire Wildlife Trust (Nov 2024). Ecological Comments
Supporting Documents	• Preliminary Ecological Appraisal (PEA) (Astute Ecology, November 2021). • Important Plants & Habitats Survey (Arbtech, June 2024) • Baseline Habitat Condition Assessment (Arbtech, June 2024) • Biodiversity Net Gain Assessment (Arbtech July 2024)

Feedback Review	
Comments	**Important Habitats** The latest survey has assessed the grassland as a Lowland Meadow vegetation type which translates into 'other lowland meadow' within the UKabs classification. This grassland habitat type is of very high distinctiveness and of recognised conservation value being derived from old meadows and pastures and typically it is moderately to very species rich. It is a Habitat of Principal Importance as it is listed on S41 of the NERC Act 2006. It is also now apparent that the vegetation community present (NVC reference MG1e) would meet Derbyshire Local Wildlife Site selection guidelines1 under guideline Gr1 for grasslands. The grassland vegetation or habitat present is therefore of County value. The adverse impact on the Lowland Meadow habitat is the most significant impact identified at the site. Habitats of Principal Importance are a material consideration in planning terms. The loss of Lowland Meadow requires bespoke compensation measures that provide the same habitat type. The loss of Lowland Meadow at the site is estimated to be 0.5 ha and though around 0.19 ha will be retained under current plans the condition of this grassland is unlikely to improve due to fragmentation and proximity to an urban environment. There are currently no proposals for bespoke compensation for this loss and off-setting locally may be difficult. As it stands the development conflicts with several sections of the National Planning Policy Framework. Section 185 (b) states that to protect and enhance biodiversity plans should, promote the conservation, restoration and enhancement of priority habitats, ecological

	networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity. Section 186 (a) states that, if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; It is not clear that the impact on the Lowland Meadow can be mitigated or compensated in line with the NPPF. In relation to Amber Valley's saved Biodiversity policy EN14 the presence of Lowland Meadow habitat that meets the threshold for selection as a Local Wildlife Site should be taken into account and the benefits of the development would need to outweigh the importance of the site for nature conservation / biodiversity and there would need to be a proposal for replacing the loss of the meadow habitat **BNG** The development will result in the loss of c.0.5 ha of Lowland Meadow with around 0.19 ha retained in poor quality. All the bramble underscrub (0.19 ha) will be lost. The loss of biodiversity has been measured using Defra's statutory biodiversity metric and there is a loss of -7.73 Biodiversity Units. It should be noted that this application was submitted prior to mandatory 10% biodiversity net gain came into effect on 12th February 2024. Therefore, the application only needs to demonstrate how a measurable net gain can be achieved as per the NPPF and the Amber Valley Local Plan biodiversity policy. **Invertebrates and Fungi** Impacts on invertebrates and fungi are more difficult to determine due to lack of survey data. The type of grassland could support some species of note but is probably not optimal for insect species of conservation note known to occur locally. In relation to the potential presence of grassland fungi the current management is not ideal, but fungi can persist in the soil for many years providing there is not too much disturbance or nutrient enrichment. In this respect the proximity of Crich Chase SSSI (240m to the south) is relevant as one of the qualifying features is a grassland fungi assemblage of national interest and historically these fields would all have formed the common land referred to in the ecology report. Mitigation and / or compensation for invertebrates and fungi have not been provided as the baseline assessment does not include this assessment. With regards to any impacts on invertebrates especially insects this can be addressed as part of any compensation for the loss of the grassland habitat. However, this is more difficult in relation to fungi as grassland fungi are associated with the soil.
Proposed Lowland Meadow Mitigation/Compensation Plan	
Broad options	The client would preferentially meet the ecological requirements on site as best as possible without reducing housing numbers if feasible
On Site Options	The grassland in the southern field appears to be of a better condition and the client proposes to retain the southernmost area and relook at the masterplan to see what could be achieved – approx. the area highlighted below. The site is only 0.85 ha in total so retaining/ providing 0.5 ha of lowland meadow habitat on site is unlikely to result in a viable development. Any meadow habitat retained is highly vulnerable to degradation and loss via neglect or ill management, such as a reversion to an amenity regime. Although, it could be argued that an amenity regime would have benefits to any grassland fungi community, which as exemplified by the community in Leicestershire's Roecliffe Manor SSSI, do thrive in closely mown lawn environments.



Off Site Options

If onsite measures are not adequate by themselves, offsite compensation could be explored. Two options present themselves;

1) Meadow creation
2) Meadow translocation

The soils of ancient grasslands cannot be recreated and if they contain a sufficiently high scoring waxcap fungi assemblage they can be considered irreplaceable, as the UK has international responsibility for waxcap grasslands, of which the UK hosts the global population foci.

This means, new meadow creation is likely to be insufficient. A new meadow recreates only the vascular plant assemblage and lacks the complex soil fauna and fungi communities that underpin the functioning of ancient grassland systems. New meadow creation measures would be best viewed as supplementary rather than a sole solution.

The best option for ensuring the ancient soil resource held within the turf is retained would therefore be via a habitat translocation of that which cannot be retained on site. This option is often considered controversial.

Due to its high risk of failure, official best practice guidance in Great Britain states that habitat translocation should be regarded, for all sites of high nature conservation value, as very much a last resort when all other alternative avenues (avoidance and mitigation) have been explored and are not feasible. In this case, neither avoidance nor mitigation are feasible.

In this case, a habitat translocation represents the **ONLY** way of allowing the development to go ahead whilst preserving the full vascular plant community alongside the soil communities associated with it, including any waxcap grassland that may be present.

This is because the development will unavoidably involve loss of Lowland Meadow acreage. Even if some lowland meadow is retained on site as is proposed, that represents a fragment (less than a third) of the current resource. In addition it would require a strict conservation covenant on its long term management into perpetuity and realistically the remaining fragment will be at risk of levels of degradation that result over time in loss of the S.41 habitat and many of its associated species.

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Literature Review.
Most LPA's present a somewhat united front against habitat translocation, however turf translocation is routinely practiced in the laying of lawns (which include meadow mats) and the literature does provide ample evidence for its efficacy as a technique for preserving important habitats and communities threatened by development.

- **Grendon and Doddershall Meadows LWS**
  Translocation of 11.6ha of Annex 1 MG4 Lowland Meadow to facilitate HS2 was carried out between 2019 and 2020.

  The vegetation present at the donor site was cut to 50-75mm above ground level and the arisings removed prior to translocation commencing. The receptor site was ploughed and stripped in preparation for the translocation works; at one point six tractors and eight excavators were working on the receptor site at the same time, stripping and temporarily stockpiling the soils which were then used to backfill the donor site once the meadow soil had been translocated to the receptor area.

  The donor soils were then either removed as turves or as loose soil depending on ground conditions.

  Turves were lifted using a grid pattern and transported for direct translocation to the prepared donor site. Translocation to was planned to ensure the species and communities within the turves are moved to suitable microtopography. Fragmentation of rarer communities was be avoided.

  The turf was moved with dimensions of 1.80m2 (1.57m x 1.15m) and a maximum depth of 300mm, depending on root structure. To maintain the integrity of the soil, it was planned not to translocate turves of less than 150mm deep. Each turf was laid at the receptor site with a spacing of no more than 50mm between each turf. Handling was kept to a minimum to prevent materials from separating and maintaining moisture levels. The soil from broken turves was utilised for gapping up as it contained both plants with their roots and seed bank.

  Using the Phasing Plan, areas within the receptor site were laid in alphabetical order to minimise trampling over the laid turves and reduce the distance the turves were moved. To limit the extent of trampling of turves, operatives used a single access route.

  There was some selectivity employed in the project, which selected turf based on grassland quality. This was determined by the percentage coverage of weeds, with only sections of turf with <5% coverage of weeds translocated.

  More details on the specifics of how this was achieved are available below, including measures on how to reduce turf slump and more even cutting with minimised soil crumbling.

  https://learninglegacy.hs2.org.uk/document/grassland-translocation-successes-and-solutions/

  All works were completed under full time ecological supervision, with daily technical notes produced with a once per week monitoring visit carried out.

  On top of the translocation, over-seeding and green hay spreading were carried

out at the receptor site to provide greater botanical diversity of lower grade turves. Collection involved both green hay spreading and targeted collection of seeds from rarer species, which were grown on into plug plants by a botanist. Some overseeding using commercial mixes was used in areas of failure.

Following guidance within CIRIA C600 the translocation took place in the dormant season for terrestrial habitats of October to February inclusive, with soil stripping ideally starting in September when soils are warm.

Results
The translocation was successful and the grassland re-established. In follow up NVC surveys, the higher grade turf areas still qualified as MG4 with only minimal species loss. Lower grade areas recorded a deterioration in communities away from MG4 towards MG9 and a drop in forbs. This was also the case in areas translocated via loose soil, which exhibited the usual successional patterns from unstable ruderal dominated communities to stable communities that is seen in newly created grassland. The results are still too young to assess long term success.

- **Durnford Quarry**
  Report from 2010 detailed results10 years on from translocation of a species rich neutral grassland in 1997. This took place following x4 years of detailed surveying and was carried out by Alaska Environmental Contracting, one of the most experienced translocation specialists in the UK. Over 100,000 turves were moved all of which were reported to still be alive and thriving, still containing numerous species indicative of ancient meadows such as marsh orchid and adders tongue fern. There was a brief period of instability following the translocation in response to the disturbance event but over 10 years it regained its former conservation value with no significant soil or community changes.

  https://www.mjca.co.uk/files/Durnford%20reduced.pdf

- **Hartland Village (Aspect Ecology)**
  'Lowland Dry Acid Grassland' and 'Lowland Heathland Meadows' in a sub-optimal condition were present. Retention in-situ was not possible and Aspect Ecology advised translocation followed by restoration in a permanent receptor area within the north of the site, which also consolidated previously fragmented areas of acid grassland and lowland heath

  The proposed approach was agreed by both the developer and local authority, and the translocation exercise was subsequently undertaken by a specialist contractor in 2018 with some areas translocated as turfs, and others as soils. Two years later monitoring work recorded that the original grassland species present pre-translocation continued to thrive. Variation corresponded to those areas translocated as turfs and as soils, The monitoring showed the grassland translocation to have been successful, thereby conserving its biodiversity interest, while the application of conservation management will ensure this interest is enhanced still further and maintained for the long term.

  https://aspect-ecology.com/february-2021-habitat-translocation-can-be-a-useful-mitigation-tool-a-case-study-of-a-successful-relocation-of-species-rich-grassland/

Receptor Site Options
The client controls some additional land near Ashbourne. This is not entirely ideal as this would remove the habitat from the local area but if suitable, this would result in preservation rather than destruction of the soil resource. Alternatively, the client wishes

to explore the potential to provide off site compensation at nearby designated sites or land adjacent to them in co-operation with the relevant landowners. Ideally this will be achieved via a habitat translocation with offsite payments made to contribute towards establishment and management.

Any proposed receptor site would need first to be surveyed to assess its suitability as a receptor site for translocated vegetation. To qualify as suitable, the following conditions must be met.

- No pre-existing Section 41 or otherwise Important Habitat present on the receptor site
- Soil conditions mirror those of the donor site, in terms of soil type, drainage, pH, aspect and nutrient status.
- Long term management via hay cut or grazing can be guaranteed.

If nutrient status is too high, due perhaps to historic improvement, the landowner may explore options for reducing nutrient status via top soil stripping, but this would require a location unlikely to be impacted by future run off or spray drift from fertiliser/pesticides, muck heaps/slurry.

Further Survey Work at Receptor Sites

- Feasibility Study comprising a desk study of available land would need to be carried out to determine which sites are likely to be most suitable
- This would need to be ground truthed by a Baseline Habitat Condition Assessment/NVC/Important Plants and possible a fungi survey to gain an accurate classification and measure of the presence or likely absence of any important habitats or communities.
- Soil testing would need to take place across both the donor and receptor sites.

Monitoring of Establishment/Securing Landowner Participation.

The high failure rates that cause most LPAs to shy away from the concept are associated with poor management during the establishment period, and the LPA would need to be satisfied that a habitat transplant could result in turf re-establishment rather than failure.

As the client is from an agricultural background, the LPA can be confident that there is capacity for appropriate management during establishment and beyond. It would be sensible to condition a monitoring plan over a 30-year period to ensure the land manager is accountable to the project's success in the long term, secured by a s.106 agreement or conservation covenant. This would be informed by a Habitat Management and Monitoring Plan. If the receptor site involves land not controlled by the client, this could perhaps follow some form of BNG habitat bank model to ensure the landowner is given a financial incentive to assure their continued participation. It may be that the project could also align with some form of Stewardship or other agricultural land management scheme.

Guidance

Successful schemes tend to operate from core guidance text Habitat Translocation a Best Practice Guide CIRIA C600 (2003) https://gat04-live-1517c8a4486c41609369c68f30c8-aa81074.divio-media.org/filer_public/2e/6c/2e6c1c0c-2c3d-4c0a-a3c8-460c866f3824/11233.pdf

Fungi	The topic of fungi poses a difficult question. This is work that should bridge a number of visits across late summer to late autumn and under the current regime of no management, fruiting bodies are likely to be suppressed, limiting the value of any survey effort. It could be surveyed in 2026 if a hay meadow cut could be arranged to provide short autumn grass. Another option is eDNA testing of the soil, which has no timing restrictions. However, this has been found more recently to be an unreliable measure as it accounts for both live and the remnant material from lost communities and can therefore provide false positives. Both options represent a significant expense and it would be in the clients better interests if the foundations of a route forward via bespoke agreement were established before this was commissioned.

In conclusion, whilst some habitat can be retained on site, in reality this is going to suffer degradation over time. the author believes the best route for this site going forward would be the controversial route of Habitat Translocation to an appropriate donor site, with success assured by the following of established best practice and case study as supported by an adaptive management and monitoring plan and schedule.

Best wishes,

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