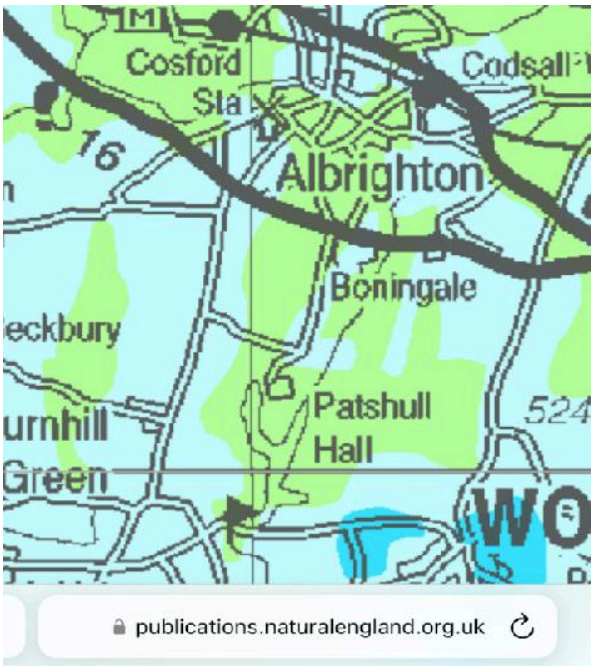
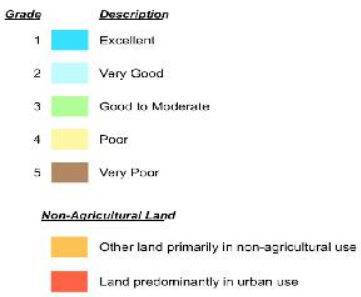
3. ENVIRONMENTAL ISSUES

Developments on prime agricultural land have profound environmental impacts, primarily through the loss of fertile soil and the disruption of ecosystems that support agriculture. Prime agricultural land is often highly productive and supports a variety of crops, contributing significantly to food security.
If this land is converted into urban or industrial developments, it permanently removes the capacity for crop production, reducing local food supply and increasing reliance on distant sources, which can raise carbon emissions due to transportation. The development process itself can lead to soil degradation, erosion and contamination from construction pollutants.

Additionally, replacing agricultural land with built environments can disrupt water cycles, increase surface runoff, and contribute to flooding. The loss of agricultural biodiversity, including pollinators and soil organisms, further exacerbates these environmental impacts, reducing the overall resilience and sustainability of the ecosystem.(NPPF Chapter 15 Paragraph 180-194)

a) **Productive farmland destroyed forever.** The site (image below) is classified by Natural England as Grade 2 (Very Good) and Grade 3 (Good to Moderate) farmland - refer to the extracts below.





This category of farmland represents the best and most versatile agricultural land (as per the new NPPF) and should be protected from significant, inappropriate, or unsustainable development. Otherwise, Shropshire and the UK's ability to grow food and remain self-sustainable will be severely compromised.

b) Award winning farming would be destroyed

The site is not just standard Grade 2 / Grade 3 farmland. It is part of the estate farmed by the 2022 UK Climate Change Champion Farming - refer to the web images below and links:

- Carbon opportunities underlined by Climate Change Champion - Crop Production Magazine (cpm-magazine.co.uk)
- Climate Change Champions - The bottom-line benefits of going green - Crop Production Magazine (cpm-magazine.co.uk)

Highlights include the following:

- Comfortably climate-positive and was one of the first farmers in the UK to trade carbon
- In six years, average soil organic matter (SOM) raised from 2.5% to 3.25%
- 85-90% of plant nutrient acquisition is microbially mediated
- Milling wheat and oats rotated across the farm's sandy loam soils with malting barley, oilseed rape, quinoa and grass leys
- Cover crops are an essential part, grazed by the sheep, which complete the regen picture. A ten-species mix is put in front of spring crops, that form a third of the arable acreage, or as a catch crop before winter cereals if the window after combining allows.
- The farmer is quoted saying:
    * *"I'm quite proud that we've never used an insecticide here, and we reap the benefits of balanced predator numbers alongside a thriving bird life. 89 skylarks have been caught and ringed in the last two years on 60ha that we've monitored,"*
    * *"We can prove we can produce good quality food alongside doing good for the planet – the tools we're using record, verify and can even geotag specific elements of the system we're selling. We already have market interest, and this will grow as we surround ourselves with like-minded farmers. And the more we do, the more we'll learn how to make the system even better."*

This irrefutably demonstrates how valuable the farmland is from an agricultural and climate change perspective.

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Carbon opportunities underlined by Climate Change Champion

Rachael Harper
15 November 2022 / 10:03 GMT

The UK's crop production Climate Change Champion 2022 has been revealed. Tom Allen-Stevens reports.

Michael Kavanagh has been awarded the accolade of *CPM* Climate Change Champion 2022.

A keen advocate of regenerative agriculture and one of the founder farmers of the Green Farm Collective, he was selected by *CPM* readers from seven growers whose progress on their journey to net zero has been profiled in the magazine.

Michael's been improving soil health through reduced cultivations, cover cropping and integrating sheep into the 245ha business, DGF & MAM Thompson Farms, he manages near Wolverhampton in the West Midlands.

Having measured his progress through Sandy, by Trinity AgTech, confirming he's comfortably climate-positive, he became one of the first farmers in the UK to trade carbon earlier this year.

c) **Biodiversity calculation.** Given that the site is award winning for its sustainability farming methods, nutrient levels, organic matter, thriving bird life etc; we question whether this has been suitably taken into consideration in the existing Biodiversity BNG Calculation? Given the 10% BNG requirement it is important that the Applicant demonstrates this.

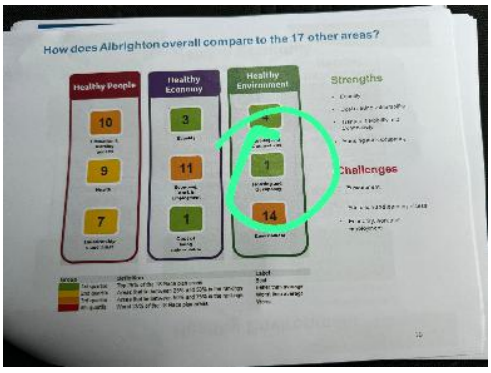
d) **Destruction of green spaces, natural landscape.** These important landscape features, open views, quiet lanes and clean air - essential for good mental health.

e) **Biodiversity, natural habitat, wildlife and flora, trees and hedges destroyed**. New landscaping is not a substitute for maintaining natural farmland and Green Belt. The proposals include extensive destruction of existing hedges that are hundreds of years old

f) **Net Zero Carbon** would not be achievable when building new houses and schools for other areas on agricultural land so far from the High St. Significantly more car journeys & increased carbon footprint. The proposals are not sustainable.

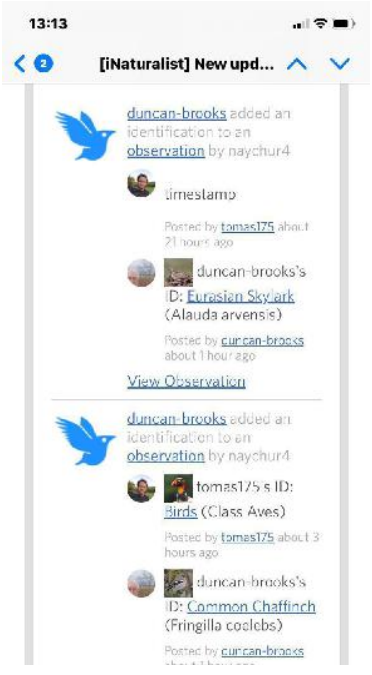
Shropshire Council's 2023 Climate Strategy progress report and their press release from 15th July 2024 (refer to links below) confirms that carbon emissions rose by 6% last year. The Applicants' proposals would further exacerbate this. If the application was granted permission, then the Planning Authorities could potentially be challenged for climate change legal challenges

- https://www.shropshire.gov.uk/media/28625/climate-strategy-2023-progress-report.pdf
- https://newsroom.shropshire.gov.uk/2024/07/rise-in-carbon-emissions-reported-but-council-remains-committed-to-net-zero-target



g) **Noise levels & disturbance, air pollution, and urbanisation** resulting from use is also unacceptable.

h) **Disruption of Ecosystems**: Agricultural lands often possess established ecosystems that, while not as biodiverse as natural habitats, still support a variety of plant, insect, and animal species. Introducing construction and development disrupts these existing ecosystems, leading to the displacement or loss of species that are adapted to the agricultural environment. This disruption often results in a net loss of biodiversity rather than an increase.



i) **Habitat Fragmentation**: Building on large tracts of agricultural land leads to habitat fragmentation, which negatively impacts biodiversity. Fragmentation creates smaller, isolated patches of habitat that can limit the movement and genetic exchange of species, reducing population sizes and increasing vulnerability to extinction. Fragmented habitats also make it difficult for species to access necessary resources and can alter predator-prey dynamics, further decreasing biodiversity.

j) **Impact on wildlife species.** The excessive artificial lighting used in a disproportionately large development poses a significant threat to

local wildlife, including species identified by the Applicants' own ecology assessment, such as skylarks (sighting of Eurasian Skylark confirmed at site), yellowhammers, and bats. These species rely on natural light cycles for navigation, feeding, and breeding. Bright lights can disorientate birds like skylarks and yellowhammers during migration, causing fatal collisions with buildings.

Similarly, artificial lighting disrupts bats' nocturnal activities, including hunting and mating, by attracting insects away from their natural habitats and into illuminated areas, thereby altering the ecological balance. The overuse of lighting not only harms these animals but also contributes to light pollution, which has broader environmental implications. It is imperative to reconsider and regulate the intensity and extent of artificial lighting in such developments to protect these vital creatures and maintain ecological integrity.

k) Response to Applicants' drawing: GREEN_INFRASTRUCTURE_UPDATED-5316229

There are no details of what the play areas are - Is there anything substantial in these or are they just grassed areas? The Applicant has a known history of downgrading and not delivering promised recreational facilities on Millfields and it is important, even in an Outline Planning Application, that the Applicant describes what the proposals are.

Extensive hedgerows have been removed as part of the proposals to widen roads but they are not shown to be replaced. This demonstrates that the Applicant has not fully considered ecology, biodiversity etc and does not understand the full cost of providing the 'green infrastructure'.

These requirements should be shown on the plans submitted and a cost analysis provided so that the Applicant can demonstrate that the proposals are viable. Our view is that none of what the Applicant has proposed has been fully considered and is therefore not viable.

The proposals are a sugar-coated set of drawings in order to get Outline Planning permission; which they have already confirmed they will 'flip' to a house building company. This is not a sustainable development which will make lives better for anyone.

l) Response to Applicants' PRELIMINARY_ECOLOGICAL_APPRAISAL_REPORT-5316202.pdf

No ecology surveys have been provided as requested by the PEA. The planning application cannot be determined until these are undertaken in full. These surveys should receive full scrutiny by the planning authorities; with a site visit as a minimum to ensure that relevant parties are familiar with the site.

3.1 RESPONSE TO THE ARBORICULTURAL ASSESSMENT

AVAG response to the Arboricultural Assessment Report submitted by the Applicant as part of this planning application is detailed below:

The Arboricultural Assessment does not take into consideration the requirements of highway visibility splays, tree protection measures required during construction, services infrastructure works, or areas where ground levels will need to change and this therefore misrepresents the full impact of the proposals on the existing trees.

The Applicant should undertake further review work to assess the true impact of tree removal required and the results should be re-input into the Biodiversity Net Gain assessment.

The following trees appear to be shown on the submitted plans in the construction zone for highway, infrastructure or build works and therefore cannot be retained without damage within the root protection zone. It appears that the Applicants' design team has not rigorously reviewed the proposals against the existing site and has missed these.

26 No x Trees / hedges which overlap with highway / route or earthworks fill zone:
G3(C), T2(B), T7(A), T12(A), T1(B), T68(A), T55(A), T56(A), T57(B), T58(C), T59(C), T60(A), T61(A), G1(C), H11(C), T30(C), T29(A), T28(A), T27(C), T26(C), T25(B), H8(C), G11(C), H9(C), G9(B), H7(C)

1 No x Tree in the middle of the school building site or earthworks fill zone: T67(A)

1 No x Tree clashing with visibility splays or earthworks fill zone: T54(A)

It is misleading for the Applicant to show that these trees can be retained and this should be reviewed again and subsequent changes to the BNG advised for review. Note that this will inevitably result in biodiversity being reduced even further.

Again, the Applicant is misrepresenting the impact of the proposal on the Green Belt which would be destroyed by the scheme.

3.2 BIODIVERSITY NET GAIN CONCERNS

The submitted BNG assessment only includes a baseline calculation, making it difficult to fully assess the development's impact on biodiversity and its ability to achieve the required 10% BNG.

a) **Ecology Space Limitation:** While it appears that hedgerow, pond, and tree habitats are to be retained, the limited available space in the proposed layout for ecology (i.e. further habitat creation necessary to offset the loss of arable land which, despite being a low distinctiveness habitat, holds a high number of biodiversity units due to the sheer area being lost, as the baseline calculation provided demonstrates) is likely to make achieving the statutory 10% net gain in biodiversity on-site highly challenging, a fact not fully acknowledged in the planning documents.

b) **Incomplete BNG Assessment:** The submitted Biodiversity Net Gain (BNG) assessment provides only a baseline calculation, lacking the net change in biodiversity units. This omission prevents understanding the impact on biodiversity units and, whether a 10% on-site net gain will be achievable as claimed, which is crucial given their market value of £20,000 - £40,000+ per unit.

c) **Legal Requirements:** Achieving a 10% net gain in biodiversity units, as required by law and if trading rules are not met, even a 10% net gain will be null and void. Meeting trading rules is difficult for a site with a proposed layout that shows limited space for significant habitat creation while existing habitats are of high and medium distinctiveness, such as this one.

d) **Tree Losses:** The necessity of hedgerow and tree line losses to accommodate the development has not been adequately addressed, and information on individual tree losses within these habitats is lacking as per page 55 of the Statutory Biodiversity Metric User Guide.

e) **Illustrative Landscape Masterplan Ambiguity:** Without a completed BNG assessment, it is unclear whether the proposed on-site habitat retention and creation will be sufficient to meet the 10% net gain requirement or if overall net loss will necessitate offsetting. This uncertainty can lead to significant unforeseen costs and legal difficulties should the untested proposed outline plan be approved.

To address these concerns, we request that the Applicant submit a draft, but complete, BNG assessment before the determination of the outline planning application.

This assessment should include both baseline and proposed plans to demonstrate the net change in biodiversity units and how the 10% net gain and trading rule compliance can be achieved on-site.

If on-site compliance is not feasible, the assessment should provide a realistic offsetting solution. A revised, more precise BNG assessment can then be completed for reserved matters.

3.3 IMPORTANCE OF HEDGEROWS AND NEED FOR PROTECTION

Hedgerows are vital components of our natural landscape, offering numerous ecological benefits, including biodiversity support, habitat connectivity, and carbon sequestration. The hedgerows surrounding this development are all well over 80 years old and, in our opinion, should be classed as important due to their historical significance as part of the field system for land used for

agriculture. According to the Hedgerow Regulations Act, a hedgerow is protected if it is more than 20 metres long with gaps of 20 metres or less in its length. We firmly believe that many, if not all, of the hedgerows in the Applicant's proposals meet the criteria and should be classified as protected hedgerows.

a) **Request for a Hedgerow Regulations Assessment -** Given the historical and ecological significance of the hedgerows on the development site & the proposed removal of these hedgerows, which are of significant ecological, historical, and landscape value, we urge the council to request a thorough assessment under the Hedgerow Regulations Act 1997 (HRA) is essential before any decisions regarding their removal are made. This assessment should be conducted alongside the BNG assessment to provide a comprehensive evaluation of the hedgerows' value. The following points support this request:

b) **Historical Evidence:** The earliest available aerial photographs on Google Earth date back to 1945, demonstrating that some of the hedgerows in question are well over 80 years old. This historical significance warrants further investigation to determine if they meet the criteria for "important" hedgerows under the Hedgerow Regulations Act 1997.

c) **Ecological and Landscape Value:** A detailed Hedgerow Regulations Assessment will consider the ecological, wildlife, and landscape criteria that are not fully captured by a BNG assessment alone. The age and established nature of these hedgerows contribute significantly to their ecological value, which cannot be replaced by new plantings.

d) **Planning Policy Compliance:** While the Applicant may argue that the BNG assessment suffices, the law requires careful assessment and consideration of the local environment's impact. The NPPF mandates the conservation, restoration, and enhancement of priority habitats, and a Hedgerow Regulations Assessment would ensure compliance with these national guidelines.

e) **Conclusion:** we respectfully request that Shropshire Council require the Applicant to conduct a Hedgerow Regulations Assessment for the hedgerows at the proposed development site. This will ensure that the council makes an informed decision that upholds the ecological, historical, and landscape value of these important features.

3.4 IMPACT ON RIVER WORFE (NITRATE VULNERABLE ZONE ID: S601)

As Albrighton falls within a Nitrate Vulnerable Zone we have significant concerns regarding the environmental impact of the development, particularly concerning nutrient neutrality and its potential effects on local watercourses and protected habitats, including the River Worfe, which has been identified as polluted.

The River Worfe catchment area, specifically from Wesley Brook to its confluence with the River Severn, has been designated as an NVZ under ID: S601. This designation underscores the ongoing and serious challenges the area faces with nitrate pollution, primarily from agricultural sources. Monitoring data indicates that nitrate levels in the River Worfe consistently exceed the critical threshold of 50 mg/l, highlighting the severe pollution already present.

The proposed development on 48 hectares of farmland in Shropshire, due to the significant and potentially irreversible impact it would have on the River Worfe, the surrounding Nitrate Vulnerable Zone (NVZ ID: S601), and local air quality. We are deeply concerned about the environmental, legal, and public health implications of this development.

a) **Critical Environmental Impact on the River Worfe.** The River Worfe is already suffering from elevated nitrate levels and has been designated as part of a Nitrate Vulnerable Zone. This area is under significant environmental strain due to nutrient pollution, primarily from agricultural runoff. Introducing a large-scale development on this farmland would exacerbate these issues, further degrading water quality.

   Disturbing the soil through development activities could release accumulated nitrates and phosphates into the water system, significantly increasing the nutrient load in the River Worfe. This could lead to severe ecological consequences such as eutrophication, resulting in algal blooms and oxygen depletion, which would harm aquatic life and disrupt the river's ecosystem.

b) **Nitrate Vulnerable Zone Considerations.** The land in question is part of NVZ S601, where nitrate pollution levels are critically high. The Environmental Protection (Water Framework Directive) Regulations require stringent controls to reduce nutrient levels in such zones, yet this development threatens to worsen the situation. By intensifying nutrient runoff, the proposal risks violating regulatory standards designed to protect water quality, potentially leading to legal challenges against the Local Authority for failing to safeguard these vulnerable environments.

c) **Legal and Planning Challenges.** Natural England mandates that planning permissions should not be granted unless developments can demonstrate nutrient neutrality, particularly in areas already identified as polluted. The River Worfe is one such area, and unless the proposed development can prove it will not increase nutrient levels, it should not proceed. The failure to meet these legal requirements could lead to significant environmental harm and potential legal challenges.

d) **Insufficient Mitigation Measures.** The current application does not include a comprehensive strategy to mitigate the additional nutrient load it will introduce. While there are potential mitigation methods, such as fallowing land, creating wetland habitats, or utilising onsite nutrient processing, these measures do not seem to be adequately addressed in the proposal. Without effective mitigation, the development could have severe long-term impacts on the local environment.

e) **Air Quality Concerns.** In addition to the risks to water quality, the proposed development poses significant threats to local air quality. Airborne pollutants, particularly ammonia (NH_3) and nitrogen oxides (NO_x), are major concerns. Agricultural activities, combined with urban development, contribute to these pollutants, which can be deposited into the River Worfe through atmospheric deposition. This not only exacerbates water pollution but also affects the health of local communities and ecosystems.

   Ammonia and nitrogen oxides are known to contribute to the formation of particulate matter and acid rain, which further degrades air and water quality. The proposed development would likely increase the concentration of these pollutants in the area, undermining efforts to maintain and improve air quality standards.

f) **Impact on the Construction Industry and Local Communities.** Efforts to reduce phosphate and nitrate pollution are challenging but necessary to protect the environment and comply with legal obligations. Approving this development without ensuring nutrient neutrality would not only threaten local ecosystems but also undermine the integrity of the planning process. This could lead to potential delays and legal disputes that may affect both the construction industry and local communities.

g) **The Role of Sustainable Agriculture in Protecting the NVZ.** The current agricultural use of this farmland plays a vital role in mitigating environmental impacts that contribute to nitrate pollution. The management of this land by the current Farmer has transitioned it to a regenerative agricultural system, utilising zero-till methods, diverse crop rotations, and biological inputs instead of synthetic fertilisers. These practices are designed to reduce runoff and enhance soil health, thereby protecting the water quality in the River Worfe.

   Replacing this sustainable agricultural system with a development would not only disrupt these protective measures but could also significantly increase the risk of nutrient leaching into the river.

The transition from agriculture to development is likely to disturb the soil and lead to greater runoff, which the River Worfe cannot afford given its current nitrate levels.

h) **Failure to Align with Environmental Protection Goals.** This development proposal runs counter to the broader goals of environmental protection and sustainable land use. At a time when the government and environmental bodies are emphasising the need for sustainable practices and protection of vulnerable ecosystems, approving this development would be a step in the wrong direction. It would not only compromise the health of the River Worfe but also undermine ongoing efforts to combat climate change and biodiversity loss.

i) **Conclusion.** In conclusion, and given the significant environmental risks, the lack of adequate mitigation measures, and the legal requirements for nutrient neutrality, we strongly urge the Local Planning Authority to refuse this application. The potential harm to the River Worfe and surrounding ecosystems, coupled with broader impacts on air quality, the construction industry, and local communities, far outweigh any potential benefits of this development.