

Bradnop Parish Council

Representation – Requirement for Full Environmental Impact Assessment (EIA)

Application: SMD/2026/0326 **Proposal:** Wind Turbine Farm – Padwick Farm, Ipstones
Submitted by: Bradnop Parish Council **Date:** July 2026

1. Introduction and Formal Position

Bradnop Parish Council reviewed the submitted documentation for application **SMD/2026/0326** at the Parish Council Meeting held on 27th July 2026 and formally requests that Staffordshire Moorlands District Council require a **full Environmental Impact Assessment (EIA)** under the **Town and Country Planning (Environmental Impact Assessment) Regulations 2017**.

The scale, height, and landscape prominence of the proposed turbines—combined with the sensitive geological, ecological, heritage and residential context—mean that only a **comprehensive, site-specific EIA** can adequately assess the likely significant environmental effects.

2. Requirement for EIA Under Legislation

Under the **EIA Regulations 2017**, Schedule 2, wind energy development may fall within Schedule 2 where the applicable turbine-number or height thresholds are met and where the development is likely to have significant environmental effects by reason of its nature, size or location.

Padwick Farm meets multiple triggers:

- Elevated topography with wide visibility across the Staffordshire Moorlands and beyond.
- Proximity to **SSSI, Sites of Biological Importance, local wildlife sites, priority habitats, Multiple Conservation Areas** and **listed buildings**.
- Potential for **geological instability** due to historic mining and natural features.
- High likelihood of **significant residential impact** (noise, flicker, lighting).
- Potential for increased **flood risk** in areas identified on the Environment Agency Flood Map for Planning and in any relevant Strategic Flood Risk Assessment.

Therefore, a full and detailed EIA is not only justified but essential.

3. SMDC Local Plan – Relevant Policies

The proposal engages numerous policies of the **Staffordshire Moorlands Local Plan (2014–2033)**, including:

- **SS1 – Development Principles** Requires development to protect environmental quality, local character and community wellbeing.
- **SS10 – Other Rural Areas Strategy** Protects rural character, landscape sensitivity, and heritage settings.
- **DC1 – Design Considerations** Requires assessment of noise, light pollution, and residential amenity.
- **DC2 – The Historic Environment** Requires assessment of impacts on listed buildings, conservation areas and other heritage assets.
- **DC3 – Landscape and Settlement Setting** Protects key ridgelines, skylines, and valued landscapes.
- **NE1 – Biodiversity and Geological Conservation** Requires protection of SSSI, priority habitats, and ecological networks.
- **NE2 – Trees, Woodland and Hedgerows** Requires assessment of habitat fragmentation and species disturbance.

The scale of the proposed turbines means that **all of these policies are materially engaged**.

4. Geological Conditions and Historic Mining

The site contains **documented geological faults**, variable sandstone strata and historic extraction features. Without a mining/geotechnical assessment, the Parish Council cannot be satisfied that:

- Turbine foundations are safe
- Vibration will not destabilise historic voids
- Ground conditions meet NPPF requirements

The Padwick Farm area lies within a zone of **historic coal and ironstone extraction**, including:

- Shallow workings
- Bell pits
- Unrecorded adits
- Areas of unstable ground and variable strata

The Parish Council requires:

- **A full geotechnical survey**

- A **mining risk assessment**, including the possibility of unrecorded shallow workings, adits, bell pits, voids and other historic extraction features.
- Ground stability modelling for turbine foundations
- Assessment of vibration impacts on historic mine voids

This is essential to ensure compliance with:

- **NE1 – Geological Conservation**
- **NPPF policies on conserving and enhancing the natural environment, and on ground conditions, pollution, land instability and contamination.**

Given the scale of turbine foundations, crane pads, access roads and cable trenches, a full mining and quarrying risk assessment is essential.

5. Industrial and Mining Archaeology

The Cultural Heritage chapter focuses on listed buildings and scheduled monuments but omits:

- Former quarry sites
- Ironstone extraction landscapes
- Spoil heaps
- Tramways and haul routes
- Mineral-processing remains
- Historic mining earthworks

These are **non-designated heritage assets** and should be assessed in accordance with the NPPF historic environment policies and **SMDC Local Plan Policy DC2 – The Historic Environment** through:

- HER mining archaeology search
- Historic mapping review
- LiDAR analysis
- Field verification

6. Residential Amenity – Property-Specific Impact Assessments

Given the turbine height and rotor diameter, the Parish Council requires **individualised assessments** for **every dwelling** within the Zone of Theoretical Visibility (ZTV), including but not limited to the attached list, covering:

6.1 Shadow Flicker

A **property-by-property flicker assessment** must include:

- Exact predicted flicker hours per year
- Seasonal variation
- Window orientation
- Topographical screening
- Mitigation measures

6.1.1 Required Shadow-Flicker Study Area

Having regard to recognised shadow-flicker assessment practice, the applicant should justify the study area used and assess all potentially affected receptors, including properties within at least 10 rotor diameters and any additional elevated or direct line-of-sight receptors up to 1,500 metres where exposure may reasonably occur.

Bradnop Parish Council considers that the assessment must include individual assessments for each dwelling, livestock building or work building:

- All dwellings with direct line-of-sight to the turbine.
- All dwellings with windows facing north-east through south-east.
- All dwellings located on elevated terrain.
- All dwellings where shadow flicker may occur seasonally or intermittently.
- Livestock and work buildings with direct line-of-sight to the turbine, with windows facing north-east through south-east, located on elevated terrain, or where shadow flicker may occur seasonally or intermittently.

This must include but is not limited to:

- Millstones, Bottom House, Bradnop, ST13 7NQ
- Apesford Farm House, Bradnop, ST13 7EQ
- Sheepshades Farm, ST13 7NY
- Lady Meadows Farm, Bradnop, ST13 7EZ
- Lower Lady Meadow Farm, Bradnop, ST13 7EZ
- Land near Lower Lady Meadows, ST13 7EZ
- Shore House Farm, Bradnop, ST13 7EY
- Wild Thorn Farm, Bradnop, ST13 7EY
- Roughstone Farm, Bradnop, ST13 7NN
- Gorstead Mill, ST13 7NL
- Greenstile, Clerks Bank, Ipstones, ST10 2LQ
- Beaver Hall, Bottom House, ST13 7EZ
- Moorland View, Bottom House, ST13 7QJ
- Smithy Garage, Bottom House, ST13 7QJ
- Bottom House Farm, ST13 7QJ

- Mehek, Bottom House, ST13 7QJ
- Standing Stones, Bottomhouse, ST13 7QN
- Old School, Berkhamsytc, ST13 7QD

In addition, each property in, but not limited to, the following postcode areas:

- ST10 2 – Ipstones, Foxt, Padwick, Bottomhouse
- ST10 3 – Froghall, Kingsley
- ST13 7 – Bradnop fringe
- ST9 0 – Kingsley Moor
- ST13 8 – Western edge

6.1.2 Required Outputs

The Parish Council requests that the applicant supply:

A. A full list of affected residential properties, including:

- Property reference number.
- Street name.
- Postcode.
- Distance from turbine.
- Orientation of principal windows.
- Predicted annual shadow-flicker hours.
- Mitigation measures proposed, if any.

B. A map showing the shadow-flicker envelope, including:

- 1,300 m and 1,500 m radii.
- Terrain-adjusted line-of-sight modelling.
- Seasonal sun-path modelling.
- Identification of all dwellings experiencing more than 30 minutes per day of shadow flicker under worst-case assumptions.

C. A statement of compliance with:

- NPPF residential amenity requirements.
- SMDC Local Plan Policy DC1 (Amenity).
- SMDC Landscape & Settlement Character SPD.
- EIA Regulations 2017 Schedule 4 (Environmental Factors).

6.1.3 Reason for Request

The proposed turbine height and elevated location may give rise to shadow-flicker effects at sensitive receptors across nearby settlements and outlying farms, including:

- Ipstones.
- Foxt.
- Froghall.

- Kingsley.
- Kingsley Moor.
- Bottomhouse.
- Outlying upland farms.

Given the scale of the development and the number of potentially affected households, a full shadow-flicker assessment is essential to ensure:

- Protection of residential amenity.
- Compliance with national and local planning policy.
- Transparency for affected residents.
- Proper consideration of mitigation measures.

This assessment is required to demonstrate compliance with **DC1 – Residential Amenity** and to ensure that potential impacts on affected households are properly identified, assessed and mitigated. This is especially important due to the nearby conservation areas including those in Ipstones, Foxt and the Caldon Canal area.

6.2 Noise Impact

A full noise assessment must be provided in accordance with current UK Government guidance for the assessment and rating of wind turbine noise, together with any relevant Institute of Acoustics good-practice guidance, including:

- Daytime and night-time noise modelling
- Low-frequency noise and amplitude modulation
- Cumulative noise with existing turbines (including those on Morridge)

6.3 Aviation Lighting / Dark Sky Impact

Turbines with a maximum blade-tip height at or above **150 metres** above ground level may require aviation lighting under **CAA requirements** and the **Air Navigation Order**.

The Parish Council requires:

- A **dark-sky impact assessment**
- Modelling of night-time skyglow
- Residential light intrusion analysis
- Cumulative lighting impact with other upland turbines

This is essential due to the rural dark-sky character of Ipstones Edge and Foxt.

7. Ecology, Habitats, and Protected Species

The site lies near:

- **Coombes Valley SSSI**
- **Churnet Valley SSSI**
- Ancient woodland pockets
- Sites of Biological Importance listed in Adopted Local Plan 2020, including one within the site boundary
- Nature Conservation Sites
- Biodiversity Action site (BAS) (NE1), as shown on Churnet Valley Master Plan Boundary (SS11)
- Priority grassland habitats
- Bat foraging corridors
- Barn owl hunting territories
- Red kite and buzzard flight paths
- Curlew and lapwing priority areas, as designated by DEFRA.

The Parish Council requires:

- Full **Phase 1 and Phase 2 ecological surveys**
- **Bat collision risk modelling** (turbines are known high-risk structures)
- **Bird flight path analysis** including raptors and migratory species
- Assessment of habitat fragmentation
- Mitigation strategy compliant with **NE1 – Biodiversity** and **Wildlife & Countryside Act 1981**

8. Heritage and Listed Structures

The turbines will be visible from:

- **Ipstones Conservation Area**
- **Foxt Conservation Area**
- Listed farmsteads along Ipstones Edge
- The historic **Churnet Valley Railway corridor**

A **Heritage Impact Assessment (HIA)** must evaluate:

- Setting impacts
- Skyline intrusion
- Harm to rural historic character
- Compliance with **DC2 – The Historic Environment** and the NPPF historic environment policies.

9. Landscape and Visual Impact

A full **Landscape & Visual Impact Assessment (LVIA)** must include:

- 3D ZTV modelling
- Photomontages from key viewpoints, including but not limited to Ipstones Edge, Foxt Road, Kingsley Holt, Bradnop, Cauldon Lowe, Weaver Hills, Morridge Road, Ramshaw Rocks, Kingsley Moor, Werrington, Leek and Cheadle.
- Cumulative impact with Bradshaw Lane and Morridge turbines
- Assessment under **DC3 – Landscape Protection**

Given the turbine height, the Parish Council considers that the proposal has the potential to cause significant **skyline and ridgeline effects** across a wide visual envelope, and this should be tested through a full LVIA and representative photomontages.

10. Hydrology, Runoff, and Soil Impact

The elevated site requires:

- Hydrological modelling, including assessment of any potential impact on private boreholes serving nearby properties.
- Runoff and drainage impact assessment
- Potential impacts on areas shown on the Environment Agency Flood Map for Planning and any locally identified surface-water, runoff or drainage-risk areas.
- Soil compaction and erosion analysis
- Watercourse protection measures

Required under **NE1 – Environmental Protection**.

11. Traffic, Access, and Construction Impact

The Parish Council requires:

- A construction traffic management plan, including estimated vehicle numbers, vehicle types and sizes, daily vehicle movements and routing arrangements.
- Assessment of heavy turbine component transport
- Road widening or strengthening proposals and their impact on neighbouring areas, properties, drainage and highway safety.
- Impact on rural lanes and verges, including environmental effects, drainage and flood-risk implications, highway safety, and access to neighbouring property entrances.

- Impact of on-site access tracks and construction routes on ancient woodland, Sites of Biological Importance and other mapped ecological receptors.
- Arboriculture Impact Assessment (AIA) in respect of construction works especially along length of tracks on site and proximity of proposed turbines.
- Root protection areas should be identified, mapped and included in the impact assessment.

12. Grid Connection and Associated Infrastructure

The submitted material does not identify how the proposed turbines would be connected to the electricity grid. This is a significant omission, as the grid connection could itself give rise to additional environmental, landscape, construction and residential amenity impacts which must be assessed as part of the EIA.

Depending on the selected connection method, the proposal may require either underground cabling or overhead high-voltage infrastructure. Underground cabling could involve trenching, access tracks, excavation, disturbance to soils and drainage patterns, impacts on hedgerows, trees, habitats, archaeology and historic mining features, and disruption to rural lanes and neighbouring properties. Overhead high-voltage lines or pylons would introduce further visual, landscape, heritage, ecological and residential amenity impacts, including potential effects on sensitive views, skyline character, bird movement and the setting of nearby settlements and heritage assets.

The Parish Council therefore requests that the applicant provides full details of the proposed grid connection route, method, construction requirements and associated infrastructure. These impacts must be assessed cumulatively and cross-referenced within the EIA sections on geology and mining risk, industrial archaeology, residential amenity, ecology, heritage, landscape and visual impact, hydrology, traffic, access and construction impact. Without this information, the overall environmental effects of the development cannot be properly understood or publicly scrutinised.

13. Conclusion and Formal Request

Given the scale, sensitivity, and potential for significant environmental effects, Bradnop Parish Council formally requests that SMDC:

Require a full Environmental Impact Assessment (EIA)

covering:

- LVIA
- HIA
- Geotechnical and mining risk
- Ecology and biodiversity

- Hydrology
- Noise and flicker
- Aviation lighting and dark-sky impact
- Residential amenity (property-specific)
- Cumulative impact with existing turbines
- Transport and construction impact
- Grid connection route, method and associated infrastructure

Only a comprehensive EIA can ensure compliance with:

- **SMDC Local Plan (SS1, SS10, DC1, DC2, DC3, NE1, NE2)**
- **NPPF policies on sustainable development, design and residential amenity, climate change and flood risk, the natural environment, ground conditions, pollution, landscape, and the historic environment.**
- **EIA Regulations 2017**
- **Wildlife & Countryside Act 1981**
- **Conservation of Habitats and Species Regulations 2017**
- **CAA aviation lighting requirements**

The Parish Council therefore requests that SMDC **does not determine the application**, or progress it to determination, until a full EIA has been completed, submitted and made available for public consultation.