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Dear Ms Northrop,

Planning application: C/5/2018/5004
Proposal: Proposed extraction of sand and gravel with progressive restoration to Heathland | Attlebridge Quarry, Reepham Road, Attlebridge, Norfolk

As the UK's leading woodland conservation charity, the Trust aims to protect native woods, trees and their wildlife for the future. Through the restoration and improvement of woodland biodiversity and increased awareness and understanding of important woodland, these aims can be achieved. We own over 1,000 sites across the UK, covering around 24,000 hectares (59,000 acres) and we have 500,000 members and supporters.

Ancient woodland is defined as an irreplaceable natural resource that has remained constantly wooded since at least 1600 AD. The length at which ancient woodland takes to develop and evolve (centuries, even millennia), coupled with the vital links it creates between plants, animals and soils accentuate its irreplaceable status. The varied and unique habitats ancient woodland sites provide for many of the UK's most important and threatened fauna and flora species cannot be re-created and cannot afford to be lost. We aim to prevent damage, fragmentation and loss of these finite irreplaceable sites.

The Woodland Trust **objects** to the planning application in question on the basis of damage and potential loss to Mileplain Plantation (grid ref: TG148168), a Plantation on Ancient Woodland Site (PAWS) designated on Natural England's Ancient Woodland Inventory (AWI).

Planning policy

National Planning Policy Framework, paragraph 175 states: "When determining planning applications, local planning authorities should apply the following principles:

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists;"

Exceptional reasons are defined in Footnote 58 as follows: "For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat."

We consider that the proposed development does not fit these criteria and as such should be refused on the grounds it does not comply with national planning policy.

Natural England's Standing Advice for Ancient Woodland and Veteran Trees[1] states: "Ancient woodland, and trees classed as 'ancient', 'veteran' or 'aged' are irreplaceable. Ancient woodland takes hundreds of years to establish and is considered important for its wildlife, soils, recreational value, and cultural, historical and landscape value."

Norfolk County Council's Core Strategy and Minerals and Waste Development Management Policies Development Plan Document states in 'Development Management Policy DM1 – Nature conservation' that "Development that would harm locally designated nature conservation and geodiversity sites and/or habitats, species or features identified in UK and Norfolk biodiversity and geodiversity action plans, will only be permitted if it can be demonstrated that sufficient measures to mitigate harm to the site, habitat(s) and/or species can be put in place, preferably in advance of development... …Potential adverse impacts off-site, caused by water contamination, changes to hydrology and/or air pollution, will also need to be considered."

Impacts on ancient woodland

This application would feature significant quarrying activity around areas of ancient woodland, resulting in harmful impacts on this irreplaceable habitat. We acknowledge that much of the actual area to be quarried constitutes felled woodland however there are some incursions of quarrying activity into the surrounding ancient woodland resulting in unacceptable loss. We also understand that the area in question has previously been subject to unlicensed felling and as such has been served a Restocking Notice by the Forestry Commission that must be complied with.

The Trust is particularly concerned about the following impacts of this development:

- Direct loss of ancient woodland habitat and soil.
- Pollution occurring from by-products of the quarrying activity e.g. dust, airborne soil particles from the movement, storage and stripping of soils, transport emissions, and chemical impacts from works. These can alter the composition of plant communities through differentially stimulating or changing competitive interactions that determine relative species abundance and diversity.

[1] https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

- Loss to local biodiversity; from resident and migrating wildlife, to site endemic soils and their associated flora. Sensitive ancient woodland species will be exposed to disturbance by noise, lighting, vibration, and other activities during the quarry's operation. Many species within ancient woodland are adapted to the relatively unchanging conditions within ancient woodland and are unable to adapt to new enforced conditions leading to more generalist species dominating the specialist woodland species.
- Fragmentation as a result of the separation of adjacent semi-natural habitats, such as small wooded areas, hedgerows, individual trees and wetland habitats, will similarly impact on woodland wildlife.
- Hydrological changes will result in alterations to the quality and quantity of ground water and surface water. This will result in adverse impacts on the characteristics and quality of the adjacent woodland's water sources from pollution/contamination and also affect the wood's soil conditions.
- Where the wood edge overhangs proposed quarry areas, the long-term retention of trees on the woodland edge will be threatened with indiscriminate lopping/felling where they are considered safety issues. This results in a reduction of the woodland canopy and impacts to the woodland edge, exposing the core woodland area to further impacts.
- Any effect of development can impact cumulatively on ancient woodland – this is much more damaging than individual effects.

Development in ancient woodland can lead to long-term changes in species composition, particularly ground flora and sensitive fauna, i.e. nesting birds, mammals and reptiles. Ancient woodland soils are important for the complex structures they have developed from centuries of being relatively undisturbed. The loss of ancient woodland to make way for the construction of this proposal will have a detrimental impact on the soil communities of Mileplain Plantation.

Further to loss of ancient woodland the more intensive land use will expose the woodland and its plant and animal populations to environmental impacts from outside of the woodland. These detrimental edge effects can result in changes to the environmental conditions within the woodland and consequently affect the wood's stable conditions. Such impacts can result in changes to ancient woodland characteristics up to three times the canopy height in from the wood edge.

Some of the main by-products of quarrying are noise and dust pollution. Ancient woodland flora is particularly sensitive to dust. Dust has a major deleterious impact on epiphytic lichens with all bar the most resistant species dying at high dust concentrations. Lichens form part of the complex ecosystem that make up ancient woodland and their health can be used as a good indicator of the quality of the rest of the habitat. Studies have shown that trees are also affected by dust pollution, suffering reductions in height growth and also in shoot, root and needle growth.

Noise associated with quarrying activity comes from a range of sources, mostly involving large machinery and vehicles. Noise levels will be elevated and likely remain constant over

time. They are likely to limit the distributions of animal species that are intolerant of noise and negatively affect their reproductive success near to woodland edges.

The necessary use of heavy machinery as part of site clearance/preparation and extraction will result in an increase in heavy-load vehicles going to and from the site. In the UK, nitrogen oxides are produced primarily by vehicle emissions. Increasing nitrogen can alter the outcome of competitive interactions, changing the character of woodland vegetation, largely in terms of species composition. There is evidence from woods across Britain that species increasing in cover are more likely to be associated with high nutrient status conditions. Some species have shown consistent increases, e.g. nettle, rough meadow grass and pendulous sedge, or decreases in abundance correlated with modelled nitrogen changes.

Where possible, mitigation measures can be explored to limit the impact of development adjacent to ancient woodland. However it should be noted that the loss of ancient woodland cannot be mitigated. In this case the loss of ancient woodland is unacceptable and in contravention of national planning policy designed to protect ancient woodland. The only possible mitigation in this instance is avoidance of ancient woodland loss.

For adjacent development, the creation of new areas of woodland or buffer zones around ancient woodland will help to reduce and ameliorate the impact of damaging edge effects. The size of the buffer is dependent on the intensity of land use adjacent to ancient woodland. Natural England's aforementioned Standing Advice recommends "leaving an appropriate buffer zone of semi-natural habitat between the development and the ancient woodland (depending on the size of the development, **a minimum buffer should be at least 15 metres**)".

However, considering the scale and intensity of the proposed development the applicants need to be considering a **buffer of at least 100m** between any planned working areas and the ancient woodland. Ideally the buffer zone should comprise a semi-natural strip planted with at least 50% tree cover. It is apparent that implementing a buffer of 100m to the ancient woodland in this case would considerably limit the available areas for extraction. As such we consider that this area is inappropriate for proposed quarrying activity and cannot feasibly be undertaken without severe impacts on the adjacent ancient woodland. Therefore this planning application should be refused planning permission.

Conclusion

Ancient woodland is irreplaceable; once lost it cannot be recreated. Any development resulting in damage or loss to ancient woodland is unacceptable and must take every step to ensure avoidance of this irreplaceable habitat.

In summary, the Woodland Trust **objects** to the application on the basis of damage and loss to an area of ancient woodland. While we recommend that a buffer of at least 100m needs to be implemented between the ancient woodland and development, we consider that the site in question is not appropriate for quarrying as it would not be possible to implement a buffer

that would adequately protect the ancient woodland. In its current form the proposed development is entirely inappropriate and considering that it falls outside of “wholly exceptional reasons” it clearly contravenes national planning policy.

We hope you find our comments to be of use to you. If you are concerned about any of the comments raised by the Trust then please do not hesitate to get in contact with us.

Yours sincerely,

Jack Taylor
Campaigner – Ancient Woodland