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Nottinghamshire County Council

Planning Group

County Hall

West Bridgford

Nottingham

NG2 7QP

FAO: Oliver Meek, Planning Development Management

6th October 2017

Your ref: ES/3712

Our ref: JMB/Minerals/Barton

Dear Oliver,

Re: Proposed extraction and processing of sand and gravel, including the construction of a new site access road, landscaping and screening bunds. Mineral washing plant and other associated infrastructure with restoration to agriculture and nature conservation areas. Barton in Fabis.

Thank you for consulting NWT on the above application. I welcome that in response to our scoping consultation letter of the 30/4/15, the applicant has undertaken a good range of ecological surveys, mainly to the correct methodology. Some of the surveys, however, were not sufficiently detailed and some are now reaching the age where it is considered, under BS 42020, that they are not sufficiently up to date to enable a robust impact assessment (2 years). This can be particularly relevant for some protected species, such as badgers, and breeding birds, where species may colonise an area as a result of a range of external factors, even though the habitat appears to be the same as when the survey was undertaken. This can therefore, result in an under-estimate of the impacts of a scheme and therefore inadequate mitigation and ecological compensation proposals.

Notwithstanding this, the surveys have shown this area to be of high ecological value, and thus NWT has substantive concerns about this application.

Planning principles

NWT supports the fundamental principles of the plan-led system. This proposed quarry was not chosen as an allocation in the draft MLP, despite a number of rounds of consultations on allocations and omission sites, and so an application at this stage is presumptive, and contrary to the aims of a strategic, plan-led approach to development. .

NWT consider that the impacts that would result from this proposed quarry (as detailed below) would be contrary to the protective policies in the NPPF and also in the current and draft MLP.

Ecological Impact Assessment

The ecological surveys are presented in separate reports, each with separate plans, which does not help in undertaking a rigorous assessment of the cumulative impacts of the proposals on habitats and species. An Ecological Constraints and Opportunities Plan should have been presented that summarises the key findings of the surveys (as recommended in BS42020), so that the most ecologically sensitive areas of the proposed site can be easily identified, and the proposed mitigation and compensation considered in this context.

Table 3 in the EcIA usefully describes how the significance of impacts should be assessed in a methodical way, for example by considering the impact on the coherence of the habitats, and the importance of identifying the sensitive receptors. Yet the impact assessment does not appear to have rigorously followed this approach, with undervaluing of several species and habitats and over-optimistic assertions about the benefits of mitigation.

Habitats

Designated Sites

The proposed site is in close proximity to Attenborough Gravel Pits SSSI and Holme Pit SSSI.

Attenborough Gravel Pits SSSI

The EcIA asserts that there would be no impacts on this site of national ecological importance, subject to mitigation, but recognises that :

"7.11 The Attenborough Gravel Pits SSSI may be subject to disturbance from noise, dust and lighting. Any lighting used within the site must be directed away from the River Trent. Dust control measures must be in place at all times to limit any dust travelling away from the Application Site into the River Trent and further afield into the SSSI. These control measures will include spraying water onto the ground, particularly when weather is dry and windy."

The EcIA and does not examine the likely impacts of noise on the sensitive species breeding and overwintering in the SSSI, and the Noise Report predicts the noise levels of 55dBA for users on the footpath near the Trent adjacent to the SSSI, but does not provide data on the baseline level to be able to evaluate the *change* in noise levels that would be experienced either by wildlife or visitors along this boundary of the SSSI. We know that some bird species are sensitive to noise levels in excess of 45dBA which may affect their breeding behaviour and mask contact calls between parents and chicks, but there are no noise contour plans in the Noise Report to show the baseline contours and the predicted changes, so that the impacts on wildlife and visitors can be properly assessed. Gravel extraction at Attenborough ceased more than a decade ago and the processing of materials ceased last year, hence the baseline environment for the wildlife on the SSSI has been getting quieter for more than a decade and the wildlife has acclimatised to that accordingly. The current land use on

the proposed development site is pasture and so is very quiet compared to the noise generated by a quarry.

In the absence of data to show the scale of predicted change to the noise environment at Attenborough Nature Reserve and SSSI, the impacts on the sensitive, rare and protected species of the SSSI cannot be properly assessed.

As can be seen from the Wintering Bird report, some of the important overwintering wildfowl species of the SSSI use the land at Barton, to graze and loaf on the grasslands, which is an important part of their behaviour.eg greylag geese, teal and wigeon (all of which are Amber list BoCC). These birds move between the SSSI and the land at Barton to find different feeding resources at each location, so the loss of permanent grassland habitats at Barton may impact the population overall, as this habitat is limited within the SSSI at Attenborough. ***The EcIA has not assessed the impacts of the loss of this habitat on bird populations as required, and as stated in the EcIA at para 4.1 and Table 2.***

Holme Pit SSSI.

The EcIA states "*7.12 There will be a stand-off of at least 370m to Holme Pit SSSI due to the separation distance between the Application Site and the SSSI. It is not anticipated that this SSSI will be subject to disturbance from noise, dust or lights within the Application Site. This SSSI is not considered to be impacted by hydrological changes. Shallow groundwater levels will be monitored at the site boundary throughout the operational phase. Water levels to these sites will be supported by discharge of water to recharge trenches and possibly also by discharge to drainage ditches supporting these sites*. "

In the absence of mitigation, it has been assessed that there would be a significant adverse impact on Holme Pit SSSI due to the loss of water flowing into the SSSI from the Eastern Drain and the Barton Drain. Mitigation is proposed to discharge treated water from the Quarry into the ditches to maintain flows. In principle, NWT agrees that this should be possible***, but it is subject to detailed baseline recording of water levels for at least 2 years (in order to identify normal and abnormal years) to understand the surface water flows to the SSSI, and throughout the working period (if permitted), with timely review and a plan of action to ensure that sufficient quantity and quality of water continues to enter the SSSI.*** The SSSI currently suffers from poor water quality, so this proposed development must not in any way exacerbate this situation.

Local Wildlife Sites (LWS)

This proposed development includes all or part of 5 LWS within the site boundary and a further 4 LWS are immediately adjacent to the site boundary. These LWS represent high value habitats in at least a County context and are part of the irreplaceable critical natural capital of the County.

Habitat loss

The proposed quarry would result in the complete loss of the Barton Flash LWS, and the loss of part of Brandshill Marsh LWS and part of Brandshill Grassland LWS.

The applicant is proposing that material from the LWS could be moved and stored and put back in other parts of the site. For example, it is proposed that Barton Flash would be stripped and moved to the Phase 3 part of the site *"to recreate an area the same size as the existing Barton Flash LWS*" and asserts that *"The proximity of this area to the River Trent is likely to recreate similar conditions to its original location, allowing it to seasonally flood as it does currently*." This is an optimistic assertion at best, and appears to be based on no evidence provided in the EcIA (and as required under the CIEEM EIA Guidance). The soil conditions and complex plant and invertebrate assemblages of this LWS cannot be moved without substantive deterioration and disruption, and would need to be placed in exactly the same edaphic conditions, which is clearly not the case, as they are notably further from the River than their current position. This is why it is accepted (such as in Defra's Biodiversity Offsetting metric) that substantially larger areas of habitat need to be created to replace lost habitats , and the

new habitat will be poorer for many years, assuming it ever reaches the same standard. ***These proposals, therefore, to completely remove Barton Flash LWS are wholly unacceptable to NWT.***

Para 7.14 states "*Part of Brandshill Marsh LWS will be lost by the proposals. The soils from this area should be stripped and stored safely until Phase 1 has been extracted and is ready to be restored. These stripped soils should then be placed back into this area to recreate a similar habitat to the area that exists currently. Water levels will be monitored at this site*." Stored soils rapidly lose their structural and ecological quality, with particularly notable losses of plant propagules and soil invertebrate and microbial diversity. The longer they are stored, the more deterioration occurs. ***The assertion, therefore in this paragraph that soils from a diverse wetland habitat, containing scarce pant species and complex assemblages can be stripped and stored for several years and then put back to re-create the same quality and diversity of habitat is not credible.***

Paragraph 7.15 states "*Part of Brandshill Grassland LWS will be lost by the proposals to create an access track into the Application Site from Green Street on the eastern boundary. This access track will be retained and therefore this small section of grassland will be permanently lost. The remaining habitat within the LWS will be annually monitored to ensure that the grassland present is effectively managed to enhance its suitability for wildlife*." This statement appears to take no account of the proposed loss of substantial areas of the LWS under storage mounds (which would be a long term impact), and the disruption and loss of further habitat through the construction and operation of the conveyor, *in addition to* the permanent loss of habitat to the access track. There also appears to be a proposal to plant trees on part of the LWS, which would damage the grassland and has not been mentioned in the impact assessment. **The impacts of these losses would therefore be major and irreversible.**

The remaining areas of the LWS would also suffer from the impacts associated with both being smaller (and therefore suffering proportionately greater edge effects) and also more fragmented from other high quality habitats. This is particularly the case for Brandshill Marsh where the hydrology would be changed by such proximity to the excavations.

Indirect impacts on LWS

The retained partial LWS and other LWS that are adjacent to the proposed quarry would suffer from a range of indirect adverse impacts including noise (covered later with regard to sensitive species) , hydrological disruption, vibration, light, NOx effects and dust deposition. Even with good dust management practices it is highly unlikely that fugitive dust from the material on the conveyor would not be deposited on these sensitive habitats. Dust deposition can lead to nutrient enrichment of the habitats and thus the loss of the rare, less competitive plant species, it may also lead to localised disruption to the ability of the plants to photosynthesise, which can affect growth.

It is proposed that there would be a 5m stand off to the canopy edge of all trees present within Barton in Fabis Pond and Drains LWS, but this would not prevent noise and vibration impacts on the species present, nor would it prevent the substantial disruption of the current hydrology for this wetland LWS which would be surrounded by extraction on the whole of its western boundary and 50% of its eastern boundary. A 10m stand off is proposed for the Borrow Pits LWS, but again , this would not prevent noise, vibration, light and dust impacts. The applicant is proposing to use directional light sources to reduce impacts on the species in the LWS, but there would still be artificial light introduced into these LWS where it does not currently exist ,which could impacts a range of species.

The Hydrology Report proposes that shallow groundwater level and surface water monitoring is undertaken so that water flows can be maintained to these wetland LWS. In principle this is possible, but would require extensive baseline recording in advance (for more than 12 months) and then a clear plan of review and action throughout the life of the scheme. This would need to be agreed in a detailed water monitoring programme in advance of any determination.

There is no assessment of the impacts of NOx on the LWS. Nitrogen from emissions to air that come into direct contact with plants in an aerial form, and deposition from the air to the ground surface acts as a fertiliser, which damages sensitive habitats, particularly species-rich grasslands. The Air Quality Report mentions the impacts of NOx only briefly and discounts any impacts on the SSSIs due to

distance, citing 200m as the distance within which an impact may occur There has been no assessment of the impacts of NOx on the valuable LWS habitats even though several fall within 200m of the emission sources (mainly the HGVs and processing plant). ***This impact assessment is therefore inadequate***.

Thus it is probable that The Borrow Pits LWS, Barton Pond and Drain LWS, Burrows Farm Grassland LWS, Brandshill LWS, Clifton Wood LWs and Clifton Fox Covert LWS and River Trent LWS would all be adversely affected by one or more of these impacts, as a result of these proposals. ***Indeed this is acknowledged in paras 6.43-6.46 of the EcIA, yet no adequate avoidance or mitigation is proposed***.

Clifton Wood is also part of a Local Nature Reserve complex that is currently used by many local people for the quiet enjoyment of nature, which would be compromised by the noise from this development, given the proximity of the southern part of the Wood to this proposed quarry.

In summary, the assessment of the impacts on these LWS is underestimated in the EcIA and the proposed mitigation is inadequate. The applicant was aware of the presence of multiple LWS from the earliest enquiry stage for this development but has chosen to still design a scheme that would cause a wholly unacceptable scale of damage to these irreplaceable habitats. The mitigation hierarchy expects that impacts should first be avoided wherever possible, yet in this case this approach has not been taken.

The proposals that habitat creation several years in the future would outweigh the impacts of losses of high value LWS habitat now, is ecologically incorrect. The species that rely on those habitats would not be able to wait for their re-establishment and there is no evidence that the conditions that lead to the creation and maintenance of these LWS habitats over centuries could be re-created.

Paragraph 118 of the NPPF states that:

"planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss;"

This quarry would result in both the loss and deterioration of irreplaceable habitats, and cannot demonstrate benefits that outweigh that loss when there has been no compelling case for its inclusion in the MLP. .

BAP/Section 41 habitats

There are extensive areas of BAP/Sn41 habitats currently present within the proposed site, including extensive areas of floodplain grazing marsh, which is a high priority BAP habitat and thus has the greatest need for protection and conservation. Hundreds of hectares of this habitat have been lost in the Trent Valley over the last century, and this area at Barton is unusual to have retained these valuable floodplain grasslands to such an extent. The floodplain grazing marsh is not, as described in paragraph 7.19, "*common and widespread*".

The EcIA states that this scheme would "*result in the loss of approximately 15ha of arable, 10ha of neutral grassland, 18ha of improved grassland, 16ha of semi-improved grassland, 4ha of marshy grassland, 0.22ha of tall ruderal herb and 2ha of scrub. Approximately 1,807m of hedgerow will be lost and 400m of ditch will be disturbed and diverted to a new course."*

Of these habitats, neutral grassland, semi-improved grassland, marshy grassland, scrub. hedgerow and ditch are all important BAP habitats that have targets for their conservation and protection. Thus a

substantial area of important habitats and a significant hedgerow resource would be lost, from this area of mature, high value landscape, resulting in direct impacts in the species that rely on those habitats. This would also fragment the remaining habitats of value in the area.

The applicant is proposing to re-create 62ha of priority habitats including reedbeds, marshy grassland, waterbodies, wet woodland, grazing marsh and grassland. These are priority habitats and their re-creation on areas of existing low ecological value (such as intensive arable land and grass leys) is to be encouraged. But that is not the case here, where they would effectively replace existing habitats of high ecological value and complexity that evolved for centuries to have diverse assemblages, with simple facsimiles that would take decades to establish an equivalent value, which may not even be possible to achieve in some cases. **It is therefore incorrect for the applicant to state *"The creation of these habitats will adequately mitigate and compensate for the loss of the existing habitats within the Application Site."***

The CIEEM EIA Guidance states that "*Ecological features might also be important because they play a key functional role in the landscape e.g. as 'stepping stones' for migratory species to allow them to move during their annual migration cycle, as well as for species to move between sites, to disperse populations to new locations, to forage, or move in response to climate change"* ***The EcIA does not, however, appear to have assessed the impacts of the scheme in this regard at all.*** This is particularly important given the role of the remnant grasslands in the Trent Valley as part of a major migratory flyway, further enhanced by their proximity to Attenborough Nature Reserve.

Therefore NWT consider that the significance of the loss of BAP/Sn41 habitat has been underestimated and that the proposed mitigation is inadequate.

Impacts on Species

Birds

The proposed quarry is in an area of high importance for birds, as identified in the EcIA, with a diverse assemblage of both breeding and overwintering birds, including several red list BoCC.

Paragraph 5.57 of the EcIA recognises that the proposed mineral extraction would impact 6 ***breeding*** bird species of **high** conservation concern (i.e. 'Red List' BoCC species) – grasshopper warbler, lapwing, (*Vanellus vanellus*), linnet, (*Carduelis cannabina*), skylark, (*Alauda arvensis*), song thrush, (*Turdus philomelos*) and yellow wagtail, (*Motacilla flava*), plus 13 species of **medium** conservation concern (i.e. 'Amber List' species) – black-headed gull, (*Chroicocephalus ridibundus*), common sandpiper, (*Actitis hypoleucos*), dunnock, (*Prunella modularis*), greylag goose, (*Anser anser*), kingfisher, mallard, (*Anas platyrhynchos*), meadow pipit, (*Anthus pratensis*), oystercatcher, (*Haematopus ostralegus*), reed bunting, (*Emberiza schoeniclus*), shelduck, (*Tadorna tadorna*), snipe, stock dove, (*Columba oenas*) and willow warbler, (*Phylloscopus trochilus*). The proposed works would also impact on 5 Green List species: (coot, (*Fulica atra*), green woodpecker, (*Picus viridis*), lesser whitethroat, (*Sylvia curruca*), swallow, (*Hirundo rustica*) and whitethroat, (*Sylvia communis*)) which are included on the Nottinghamshire BAP and two Green List species (Cettis's warbler and barn owl) included on the Schedule 1 List of the Wildlife and Countryside Act 1981.

The applicant concludes in para 5.58 that the number of breeding species recorded indicates that the Application Site has a district level value. NWT disagree with this, as the site meets Criterion 1 of the published LWS bird criteria for Notts (LWS handbook Part 2a published 2014) - *" Criterion 1: Any site that regularly supports a species monitored by the Rare Breeding Birds Panel".* In this case, for *C*etti's warbler and kingfisher. The site also meets *"Criterion 3: Any site that regularly has two or more breeding species of Waders*"**,,** in this case lapwing and oystercatcher**.** ***Thus by definition this site is of County Level importance, so its value has been underestimated.***

The appearance of new breeding bird species in the area since the 2015 survey, demonstrates how quickly ecological reports can become out of date, even where the habitat appears not have changed since the previous surveys.

No proper assessment has been made of the loss of the hunting habitat used by barn owls, a Schedule 1 species, nor of the impacts of noise in such close proximity to their breeding location**.**.

The EcIA also identifies that the proposed works may impact on 9 wintering bird species of **high** conservation concern (i.e. 'Red List' species) – fieldfare, (*Turdus pilaris*), grey wagtail, (*Motacilla cinerea*), lapwing, linnet, redwing, skylark, song thrush, starling, (*Sturnus vulgaris*) and yellowhammer, (*Emberiza citrinella*), plus 14 wintering bird species of **medium** conservation concern (i.e. 'Amber List' species) – bullfinch, (*Pyrrhula pyrrhula*), black-headed gull, dunnock, greylag goose, kestrel, (*Falco tinnunculus*), kingfisher, mallard, meadow pipit, mute swan, (*Cygnus olor*), reed bunting, snipe, stock dove, teal, (*Anas crecca*) and wigeon, (*Anas penelope*). The proposed works may also impact on 4 Green List species (tufted duck, (*Aythya fuligula*), green woodpecker, grey heron, (*Ardea cinerea*) and coot) which are listed on the Nottinghamshire Local Bap and 1 Green List species (Cetti's warbler) which is included on the Schedule 1 List of the Wildlife and Countryside Act 1981.

Para 5.62 recognises that the number of species recorded within the Application Site mean that it has County level importance for the wintering bird assemblage present in this area.

For both breeding and wintering birds, the applicant has not rigorously followed their own methodology, as stated in the EcIA, to properly assess the direct impacts of the loss of habitat at this scale on these species, for example by considering the meta population in the area and how this might be affected.

There is also no meaningful evaluation of the indirect impacts of noise and vibration on birds, despite the proposal, for example, to extract within 10m of scrub used by breeding Cetti's warblers(a Schedule 1 species) and grasshopper warblers. The Noise Report asserts that in the absence of Government guidance on the impacts of noise on birds they cannot undertake that assessment, yet the use of noise contours to show changes in noise levels is regularly used, and helps to show both the absolute predicted levels and the degree of change over the current baseline. Ecological expertise combined with well established research on impacts on birds from noise can be used to assess the impacts that would occur. ***In the absence of a robust impact assessment , it is inevitable that the scale and scope of the require mitigation cannot have been properly assessed***.

The applicant has proposed some measures to reduce the impacts on these species, such as letting the retained hedgerows grow taller and thicker to provide more feeding habitat for hedgerow species. Whilst this would have some benefit, it would not outweigh the loss of 1800m of hedgerow. There are other measures that could be employed to help to reduce the impacts of the loss of feeding and breeding habitat for some bird species (eg. linnet, yellowhammer and grey partridge) such as the seeding of storage mounds with seed-rich mixes of forbs and grasses to provide good foraging conditions. However, this would not replace the substantial area (65ha+) of habitat that is proposed to be lost.

The assertion that restoring the habitat in 5 or 10 years time would be adequate mitigation for the loss of high value habitats used by a diverse assemblage of birds on this scale is incorrect.

Bats

Activity surveys were undertaken for bats, however not all the visits were completed and not all the transects were finished, so the proposed area of impact was not covered thoroughly. "*At least*" 4

species of bats were recorded, according to the EcIA, during these surveys, with “unknown Myotis” being one of these. The Bat Roost report, however, makes tentative identifications of the bats recorded during that survey which include 4 Myotis species – Whiskered, Natterers, Brandt’s and Daubenton’s, in addition to Common and Soprano pipistrelles and noctules, thus indicating that the site may have considerably more bat interest than was concluded from the activity survey. This would indicate that the site is potentially of County value for bats (reaching the threshold of 7 species as per the LWS criterion) and so the sensitivity of bats as a receptor has been underestimated.

Consequently the assessment of impacts on bats is inadequate. The loss of hedgerows, ditches, scrub, SI grassland and wetland habitats would all affect bats through loss of foraging areas. It is also improbable that the bats currently using the Barton Pond and Drain LWS and the Borrow Pits Barton LWS would not be affected by extraction right up to the edge of these features. Whilst the probable tree roost is proposed to be retained within the scheme, the impacts of a roost being in such close proximity to the edge of the extraction area and immediate adjacent to the construction of a large storage mound have not been assessed. There is also no robust assessment of the impacts of noise, vibration and increased lighting on bats, all of which can affect foraging efficiency and breeding potential. ***The impact of the proposed scheme on bats has therefore been significantly underestimated and on this basis any proposed mitigation is inadequate.***

The ES asserts (9.4.10) that if the noise levels are acceptable to humans then they will be acceptable to wildlife. This is an extraordinary assertion, appearing to be based on no differentiation between the known biologically different hearing capabilities and sensitivities of humans and other species. ***This undermines any of the assessment of noise impacts on the fauna present on the site, which has clearly not been undertaken rigorously.***

Riparian Mammals

Para 5.34 of the EcIA states that the surveys did not record any definitive proof of otters or water voles currently using the Application Site, but then says that claw marks, a potential otter slide and a potential otter footprint were identified along the southern/eastern bank of the River Trent that borders the western boundary of the Application Site. In addition, a potential disused water vole burrow was also identified along this bank. The consultants state that no evidence of otters or water voles was identified within any of the ditches and ponds present within the site, which may currently be the case, but given the close proximity of otter signs to the proposed development, ***a robust assessment of the potential impacts of noise, vibration and disturbance should be undertaken for otters. The water vole survey should be updated as this situation may have changed and water voles may be present within the ditches of the site.*** The EcIA recommends that otter and water vole surveys are undertaken before each phase of working, ***if permitted, this should be conditioned.*** If the water voles are confirmed to be not present or only present within the river bank, then the 30m stand-off should ensure that they would not be affected (except possibly where the cut through the bank is proposed).

Herptiles

The ECIA assesses the proposed site to be of local value for amphibians, given the presence of smooth newts, frogs and toads. Toads(a BAP/Sn 41 species) were found in significant numbers under the reptile refugia, but had not been found in the amphibian surveys, indicating that the survey did not adequately cover all the suitable wetland features of the site. It is probable that the toads are breeding in the ditches, ***and so the impact of the loss of 400m of those ditches has not been properly assessed and no adequate mitigation has been proposed.***

No reptiles were found during the surveys, despite the presence of suitable habitat, particularly for grass snake.

Invertebrates

The invertebrate surveys were not carried out to the recommended methodology. NE NERR005 states that preferably 5 surveys with a minimum of 4 surveys between April and September should be undertaken (3 were undertaken). Also pit fall traps were only set out between 15th May and 12th June, so no later summer invertebrates were sampled, which is a constraint on the accuracy of the results. The same can be said for the aquatic invertebrate surveys, also covered by NE NERR005 which says preferably 5 surveys with a minimum of 4 surveys between April and September (only 2 appear to have been undertaken with no details of the techniques used).

Even with the incomplete surveys, six nationally scarce species of beetles were found, with one species also included in the UK BAP (Necklace ground beetle, (*Carabus monilis*)). The Invertebrate Report acknowledges that this beetle, has recently been upgraded to 'endangered' status and states in para 5.67 "*Due to the presence of "potentially a very large population" of an endangered UK BAP species,the Application Site is considered to be of county value to invertebrates (Specifically Carabus monilis)."*

Overall, the consultant concluded that "*the wetland areas were of considerable interest, both for the overall assemblage and for some scarce species. There appeared to be very little difference between Barton Flash and the marshy grassland in the south-east of the site, though all of the scarce species were found in the latter area. As much as possible of the wetland areas should be retained, with the southern part being most important. This would include all of the land to the south-east of the ditch, together with a buffer strip to the north-west of the ditch. The semi-improved grassland held a good assemblage of species, particularly in the south-east of the site. Ideally a significant area of this grassland should be retained. It was in the semi-improved grassland that the UK BAP ground beetle Carabus monilis was recorded apparently with a fairly strong population. While it was only recorded in Area 3 on Fig 3 in Appendix 2, this largely reflects the fact that this was the area where pitfall traps were set, the species being very difficult to record by other methods."* This clearly demonstrates the high value of significant areas of the proposed site for invertebrates and that the scheme, by removing virtually all of these habitats, ***would have a major adverse impact on invertebrates.***

In order to try to conserve the endangered species (and Sn41 Species of Principal Importance) *Carabus monilis*, the applicant has proposed translocation. Yet the precise habitat requirements of this species are somewhat unknown and no assessment has been undertaken of whether the receptor site has any *Carabus monilis* already present and if it does, whether it has any spare carrying capacity to accept any additional *Carabus monilis*. ***These mitigation proposals are therefore uncertain and inadequate.***

Restoration

As stated in our Scoping Response, and in our response to the draft Allocation Consultation for the MLP, *" the restoration of this site should be biodiversity lead, focussing on the priority BAP/Sn 41 habitats for the Trent floodplain**, ie. wet grassland, reedbed, marsh, small ponds (less than 10m2) and wet woodland**. Large areas of open water are **not** a priority habitat*." The proposed restoration scheme is therefore disappointing as it incorporates a large expanse of open water. NWT acknowledge the proposed inclusion of reedbed, marsh and grassland, ***but these areas are smaller than the open water and would not replace the existing high quality and diverse habitats in either in scale or quality***. Notwithstanding the fact that it would be expected that an area of open water would be an unavoidable outcome of a Quarry in this area, aligning with the final void, the proportion of open water indicated for this site is unacceptable. NWT welcome that the proposal for a marina has been removed, and would expect that were the site permitted, it

should be conditioned that the restored habitats are retained in perpetuity (or for at least 25 years) for nature conservation, with extended funds for aftercare. ***The current proposal for only 5 years of aftercare is unacceptable and fundamentally undermines the proposed use of re-created habitats as mitigation for the loss of high quality LWS and BAP/Sn41 habitats. The restored habitats should be managed for nature conservation in perpetuity (or for a minimum of 25 years).***

NWT welcome the principle of a river connection to a waterbody, but have concerns that the connection as proposed would be of limited ecological value and might be re-purposed in the future for other uses than as a means for fish passage into a spawning backwater.

The proposal to permanently lose habitat on the Brandshill Grassland LWS to tree planting is also unacceptable, as is the loss of grassland to a permanently retained access track, whose final purpose is unclear.

The annotations on ES17-7 appear to show retained trees and shrubs were they do not currently occur and where they could not possibly be after the proposed working of Phases 4 and 5.

NWT note the potential limitations on the habitats that can be restored as a result of the safeguarding limitations for EMA, however this cannot be used to justify the large area of open water, as this would attract several of the flocking species of greatest concern to EMA.

The scheme does not contain sufficient details to be assured of the likelihood of the habitats being successfully achieved, in our Scoping Response NWT asked for:

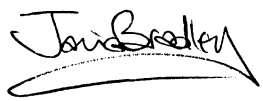
a) Detail the proposed habitats in terms of the rationale behind their choice, their intended composition and the target habitat (preferably using the National Vegetation Classification as a descriptive tool).
b) Describe the methods of hydrological restoration, substrate preparation, plant establishment, plant type and form, provenance of material, establishment maintenance and long term aftercare.
c) *Provide assurance of the long term funding for management of the habitats*."

None of this has been provided.

In summary, the restoration scheme does not contain sufficient areas of high priority habitat, is dominated by a large, deep lake of limited ecological interest, and has an insufficient commitment to future management of the re-created habitats, so that their role in mitigation or ecological compensation cannot be guaranteed.

On the basis of the above, **NWT object to this proposed development**. Please do not hesitate to contact me should you have any queries about the foregoing or if I can help in any way. I would be happy for you to forward this letter directly to the Applicants and/or to discuss these matters directly with you and them if that would be of help.

Yours sincerely



Janice Bradley C.Env., MCIEEM

Head of Conservation

c.c. Nick Crouch, NCC