

Worcestershire County Council
Development Control
County Hall Spetchley Road
Worcester
Worcestershire
WR5 2NP

Our ref: SV/2020/110574/01-L01
Your ref: 19/000053/CM
Date: 31 March 2020

FAO: Steven Aldridge

Dear Sir

PROPOSED SAND AND GRAVEL QUARRY WITH PROGRESSIVE RESTORATION USING SITE DERIVED AND IMPORTED INERT MATERIAL TO AGRICULTURAL PARKLAND, PUBLIC ACCESS AND NATURE ENHANCEMENT AT LAND AT LEA CASTLE FARM, WOLVERLEY ROAD, BROADWATERS, KIDDERMINSTER, WORCESTERSHIRE

I refer to the above planning application which was received on 26 February 2020.

We make the following comments:

Hydrogeology:

The Water Resources Technical Appendix covering the hydrological and hydrogeological impact assessment addresses many of the points raised in our response to the EIA scoping opinion.

A good amount of monitoring has been done to establish the groundwater levels across the site and confirms that the site will be worked dry. This suggests that the working quarry should have little impact on the water resources in the area if greenfield runoff rates are maintained.

The report presents a detailed risk assessment and mitigation plan for pollution prevention during works. Again this should reduce to a minimum the likelihood of spills etc causing contamination of the groundwater providing best practice is followed.

However, we are concerned about the ongoing impacts of reduced permeability over the site and the need for the land drains and soakaway ponds once restoration is complete. These will act to concentrate recharge and reduce the depth of unsaturated zone and hence potentially increase the risk of groundwater pollution in this area. The report has stated that groundwater mounding beneath these ponds will not be an issue and that recharge rates will remain the same overall.

Environment Agency
Hafren House, Welshpool Road, Shelton, Shrewsbury, Shropshire, SY3 8BB.
Customer services line: 03708 506 506
www.gov.uk/environment-agency

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We consider that the next stage of this will be to devise a monitoring programme that can establish the following parameters:

1. Mounding beneath the soakaway ponds is not occurring.
2. Water quality in and groundwater around the soakaway ponds is unpolluted.
3. Groundwater levels in and around the site are not reducing (as a result of this development).

It should be noted that a lot of work has been done by various bodies to maintain flows and ecology of Hurcott and Podmore Pool Site of Special Scientific Interest (SSSI), Hurcott Pasture SSSI, Stourvale Marsh SSSI and Puxton Marshes SSSI. We would re-iterate that this development should have no detrimental impact on these features. In addition, this site is in proximity to important public water supplies and within a Source Protection Zone (SPZ) 3 and groundwater protection must be a high priority. Monitoring should also ensure that excavation and importation of inert material does not cause harm to nearby SSSI waterbodies by reducing hydrological connectivity.

In view of the above, we would recommend the imposition of the following condition:

CONDITION:

No development shall take place until a groundwater, surface water level and quality, monitoring scheme is submitted to and approved in writing by the Local Planning Authority (LPA), in consultation with the Environment Agency. Thereafter the scheme shall be implemented in accordance with the approved plans. The Scheme shall include, but may not be limited to:

- *pre-commencement, operational (extraction phase) and post extraction monitoring, of the existing onsite monitoring boreholes identified in the Water Resources Technical Appendix. Additional monitoring points will be required to monitor the soakaway ponds post restoration.*
- *method and nature of sampling/measurement;*
- *a programme detailing frequency and duration of monitoring along with details of how and when the monitoring data and the Scheme itself shall be reviewed to assess if impacts (if any) are occurring;*
- *trigger levels when action is required to protect a water feature;*
- *details of any contingency and mitigation proposals should a trigger level be breached and an impact be apparent at a water feature;*
- *a clause (in the event that an adverse impact/risk of deterioration attributable to the mineral extraction is noted in the groundwater / surface water monitoring data) for the temporary cessation of mineral extraction whilst investigation into the apparent deterioration is undertaken;*
- *proposals to investigate the cause and measures to avoid, mitigate or remedy any such risks; and to monitor and amend any failures, shall be submitted to the Local Planning Authority for their approval in consultation with the Environment Agency.*

REASON: *To protect the water environment and prevent any deterioration of 'controlled waters' (as defined under the Water Resources Act 1991), including surface and ground waters.*

Note to above condition - We would expect to be consulted on all details pertaining to the above recommended condition. With regards to frequency of monitoring, we consider at least monthly dip (or time-series data via logger) monitoring to be a standard frequency for such monitoring during the extraction phase of development.

Flood Risk: The proposed development is located within Flood Zone 1 (low probability) based on our 'indicative' Flood Map for planning. However, there may be ponds and drains in and around the quarry area.

In this instance given the scale and nature of the proposal within flood zone 1 we would expect your Floods section, as the Lead Local Flood Authority (LLFA) to lead on the surface water management aspects (utilising the latest 'climate change' allowances within the NPPG) and those issues associated with ordinary watercourses/ditches/groundwater flooding; both operational and post restoration, to inform potential risks and avoidance/mitigation measures.

Biodiversity:

The restoration could be improved and provide greater net gain and ecological benefits by establishing ecological linkages through wetland habitat and associated species.

We have commented above about hydrological monitoring to ensure excavation and importation of inert material (see EPR permit comments) does not cause harm to nearby SSSI waterbodies by reducing hydrological connectivity.

Net Gain and ecological networks

The site occupies an important location between the River Stour (LWS) and the Staffordshire and Worcestershire Canal (LWS) to the north west and Hurcott and Podmore Pools (SSSI & LWS) to the south east. Each of these sites are cited as having important wetland ecology. The Worcestershire Mineral Local Plan (MLP 21) states that mineral restoration must contribute to ecological networks within and beyond the site at a wider landscape level. The proposed restoration plan does not go far enough to create robust ecological networks that could be utilised by a range of species within the landscape.

Primarily the concept restoration plan states the majority of the site will return to arable use with small areas of acid grassland and ephemeral wet grassland/pools. Many of these restoration measures will be adversely affected by agricultural practices and may not survive long enough to provide a net gain for biodiversity in perpetuity. We would not comment on the specifics of the acid grassland or net gain calculator, we leave that for you and your Ecologist/NE. However we would recommend that the restoration plan would benefit from creating some areas of permanent water with ephemeral wet pools dispersed between.

Permanent pools can be hotspots for wildlife as they are colonised by wetland plants and invertebrates and can encourage species within our remit. They can also provide a food source for bats and birds in the form of emerging insects. Creating some permanent waterbodies would augment the site's ability to function as a wildlife corridor linking up the wildlife sites in the landscape. It is important to note that retrospective restoration of quarries can be disproportionately expensive when compared to phased creation of environmental enhancements, rather than creation at the end of the working period. Therefore the creation and provision of wetlands should be a gradual phased process that follows the working phases of the area, rather than at the end of the working period.

We would also advise that landscaped soakaway ponds could also contribute to biodiversity if they were planted up with phragmites reedbed - a Worcestershire BAP habitat and valuable wildlife resource.

Protected species

Otter

We would suggest a greater consideration of otters that may be in the area. The site is surrounded by wetland wildlife sites that are highly suitable for otters. Otters have large territories and may be especially likely to use the site during winter to escape extreme flooding. Opportunities could be provided linked to the above.

Native Crayfish

If permanent pools were created these could also potentially function as ARK sites for the White Clawed Crayfish (WCC) population in the Wyre Forest. This is one of the last remaining populations of WCC in Worcestershire and is under constant threat from non-native crayfish and disease. If a group of these were relocated to an offline pool in the restoration area this would help secure the future of the species and deliver a Worcestershire BAP target.

The 'Ark Sites for White-Clawed Crayfish – guidance for the aggregates industry', Buglife, The Invertebrate Conservation Trust, may assist consideration and of this within the restoration:

<https://www.buglife.org.uk/sites/default/files/Crayfish%20Ark%20sites%20guidance%20for%20the%20aggregates%20industry.pdf>

Environmental Permitting Regulations - Inert landfilling

The operators will be required to operate the infilling as part of the restoration proposals under a relevant Environmental Permit, which will likely include requirements to undertake monitoring to assess any potential impact on the environment and local receptors. Dust and noise could be particular issues that the operator must be aware of during the landfilling phases. We would leave any pollution issues arising from the extraction phase for you to consider, perhaps in consultation with Worcestershire Regulatory Services.

Informative - An Environmental Permit from the Environment Agency will be required for the storage, treatment and disposal of inert extractive wastes resulting from the extraction of mineral resources. A further Environmental Permit will be required, should waste be accepted and deposited on site for restoration purposes. No Permit application has been received/twin tracked with the planning application so we cannot give you any certainty on these matters. We would advise the applicant to contact our National Permitting Service for basic and enhanced pre-application advice. Further information can be found at <https://www.gov.uk/guidance/waste-environmental-permitspermitting>

Operators should incorporate pollution prevention measures to protect ground and surface water. Previous Pollution Prevention Guidance maintained by the Environment Agency has been withdrawn but is still available in the national archives at: <https://www.gov.uk/government/collections/pollution-prevention-guidance-ppg>

We would refer to the latest Pollution Prevention Guidance targeted at specific activities, available at: <https://www.gov.uk/guidance/pollution-prevention-for-businesses>

Mining Waste Directive (MWD) The MWD brought in changes to the way Mining operations are regulated in England and Wales. If you manage extractive waste then this activity may be a mining waste operation, which is regulated under the EPR.

Extractive waste is defined as waste resulting from the prospecting, extraction, treatment and storage of mineral resources and the workings of quarries. In reality this

means heaps / tips and ponds / lagoons used to contain and settle waste fines. There are exemptions to this which can be assessed on a case by case basis. Further information on the above permitting matters is available from our EPR Waste team.

I trust the above will assist in your determination of the application.

Yours faithfully

Mark Davies
Planning Specialist