Moneystone Quarry

Ecology Statement, Condition 9

Reserved Matters Application: SMD/2016/0378
Outline permission for the erection of a high quality leisure Development

September 2019

Control sheet

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Contents

1. Introduction

1.1 This submission is made in respect of ecological aspects of Condition 9 of SMD/2016/0378 Outline permission for the erection of a high quality leisure Development. Condition 9 requires the following:

> *9. Any development or activity proposed including any footpaths, cycleways, bridleways and outdoor activities in the areas noted as 'Area of Retained Landscape' on the approved Parameters Plan (dwg ref PL1088.M.110 rev 6) shall be informed by an Ecological and Arboricultural Assessment, identifying the nature of the development/activity proposed and an assessment of its impact, and such assessments shall be submitted as part of any future reserved matters applications for this part of the site.*
>
> *Reason:- In the interests of the character and appearance of the area, ecology and tree protection in accordance with Policies NC1, DC1 DC3 and the National Planning Policy Framework*

1.2 With regard to PL1088.M.110 rev 6 the key areas for consideration in terms of ecological issues are areas of woodland and grassland in the southern half of Quarry 1 and associated legally protected species.

1.3 A joint site walkover was undertaken in autumn 2018 with arboricultural (Urban Green) and landscape specialists). The aim of the walkover was to make an assessment of the least damaging routes for paths/cycle routes within woodland (referred to as W1 in the Ecology Chapter of the Environmental Statement).

1.4 This submission identifies sensitive ecological features, impacts and the proposed approach to minimise the effects of activities including footpaths, cycelways, bridleways and outdoor activities within the Area of Retained Landscape.

2. Site description

2.1 Ecological surveys have been carried out at the site and updated over an extensive period. This includes information recorded from initial phase 1 surveys in 2006, updating and ES detailed surveys in 2010 and 2011 and more recent surveys including 2018.

2.2 The proposed activities are shown on the Appended plan 1088.4-PLA-00-XX-DR-L-006 and are focused in areas within the southern half of Quarry 1 (Q1) as described in the following paragraphs.

2.3 The small outdoor play area and path (including a boardwalk over a recently created ditch) will be located within moderately diverse grassland in the southern half of Q1. This area, described in the ES as being a moderately species rich grassland that includes woodrush, bent grasses, mouse ear hawkweed, red fescue, heather, the moss *Rhytidiadelphus squarrosus* and foliose lichens. This grassland is kept short by rabbit grazing. Reptiles (grass snake, sow worm) and amphibians (including great crested newt) have been recorded in this area.

2.4 Further paths will be created within woodland (described as W1 in the ES) in the southern and eastern part of Q1.

2.5 W1 is a sloping complex area of woodland, rising from the River Churnet, the lower areas of the woodland are locally wet (marked as ‘B’ on the appended plan) and support wet woodland and associated ground flora. Moving upslope the woodland is unmanaged and has a species poor ground flora dominated by bramble, an area of ancient woodland is present (marked as ‘A’ on the appended plan) whilst the uppermost part of the woodland is plantation. There are a number of level changes in the woodland, a consequence of previous mineral workings to create areas for the establishment of two balancing ponds as part of the quarries silt management process.

3. Impact Assessment

3.1 This section includes an impact assessment of the proposed activities and includes mitigation and enhancement measures.

3.2 The potential effects will be to habitat (woodland and grassland) and species (e.g. bats, amphibians, reptiles and nesting birds). It should be noted that the works are relatively small scale involving the establishment of paths using no-dig techniques. Paths will be a maximum of 2.3 m in width. A small outdoor play area will be created and a board walk will be installed over a relatively recently established ditch.

3.3 Areas of valuable habitat within the proposed activity areas includes moderately diverse grassland, trees and areas of semi-natural woodland groundflora. The most sensitive features, ancient woodland and wet woodland have been avoided by careful routeing. Species that may occur in these areas include amphibians, reptiles, bats and nesting birds. Furthermore future routeing and micro-siting will allow for further avoidance of damage and disturbance to habitats and species.

3.4 Activities, impacts and protection measures are described in Table 1 below and shown on the appended plan:

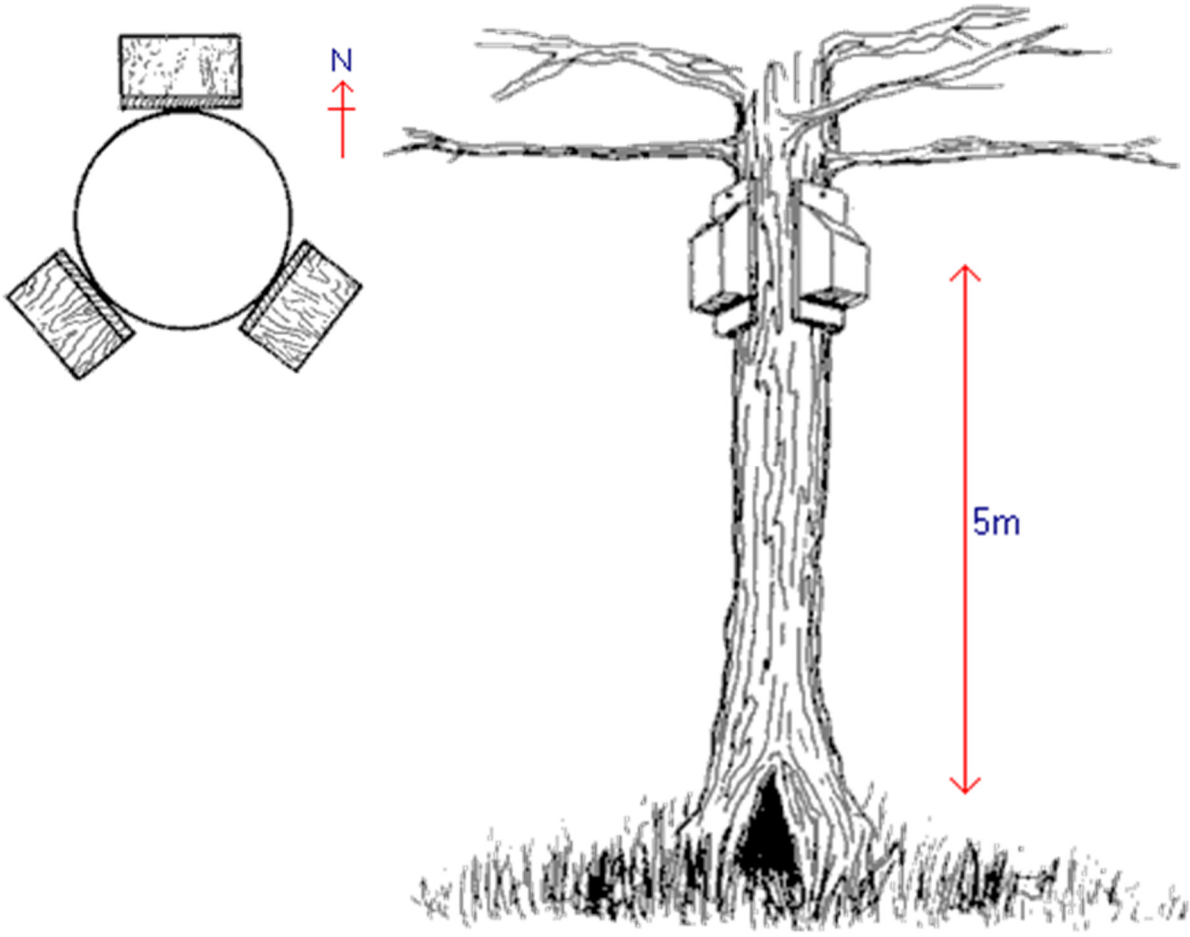
Table 1 Activities, impacts and mitigation measures

Activity	Location	Impact (negative and positive)	Mitigation Measure
Outdoor play area and creation of path	Northern tip of grassland in Q1.	Loss of small area of grassland, disturbance to reptiles and amphibians (including great crested newt). Creation of open bare substrate will benefit invertebrates.	Due to the small scale nature of the works it is considered that licensing is not required for great crested newts. Vegetation management and an ecological watching brief will be sufficient to ensure that impacts to reptiles and amphibians are avoided for these activities: • The proposed working area and path route should be marked out with high-viz fencing in advance of works commencing. • The working area and path route plus a 2 m buffer should be strimmed to 150 mm at least 1 week prior to works commencing. Risings should be left in situ for 24 hours. This will deter reptiles and amphibians away from the working area. • Clearance of habitats where required, should be undertaken using hand held machinery (i.e. strimmer, brushcutter, chainsaw); • High viz fencing (e.g. netlon) should be established and maintained throughout the works to prevent machine access onto areas of grassland outside of the working area. • No stock piling of materials in the grassland area. Any materials should be stored on areas of hard standing away from grassland. • A pre-works check will be undertaken by an ecologist and site checks (ECoW) will be undertaken to ensure that protection measures are being adhered to. • Should any amphibians or reptiles be encountered by the contractor works should stop in that area until further advice is sought from the scheme ecologist.
Creation of board walk	Grassland and new ditch in Q1.	Potential disturbance to reptiles and amphibians.	As above, plus pollution prevention measures (use of sand bags) to ensure there is no substrate run off into the ditch
Creation of path	Woodland eastern and southern edges of Q1.	Loss of trees, damage to ground flora, disturbance to species (amphibians, reptiles and nesting birds).	Careful routeing see Appended Plan which highlights areas of ancient (‘A) and wet woodland (‘B’). Prior to works commencing a further joint routeing exercise (with the contractor) will be undertaken to mark out and micro-site the path route, avoiding habitat and trees of ecological value.

		Opening up the woodland will encourage light ingress which will benefit groundflora species.	• During the walkover in autumn 2018 a route was chosen to avoid mature trees that provide bat roost potential. However, should any tree removal or other works which require tree management (e.g. pruning) will be subject to a pre-works check by an ecologist to make an assessment of bat roost potential. If bat roost potential is identified consideration should be given to re-routeing or appropriate mitigation will be implemented (e.g. soft felling and supervision). • Tree removal/pruning works will be undertaken outside of the bird nesting season (March-September), if this is not possible pre-works nesting bird checks will be undertaken by an ecologist and work will not precede until vegetation is declared free of nesting birds. • The route of the path will be pegged out in advance of disturbance of any ground vegetation. • Following this the route + a minimum 5 m buffer (either side) will be walked and searched for the presence of amphibians and reptiles. If either of these are present, refugia will be carefully dismantled and any animals encountered will be removed to suitable habitat outside of the working area. • This search and habitat removal exercise should be undertaken outside of the hibernation period (November-February), if path works are carried out in this period further site checks will be carried out by an ecologist. • Felled timber and deadwood to be used to create habitat piles as directed by the scheme ecologist. • Following pegging out of the route an ecologist will check for the presence of any valuable ground flora to advise on further micro-siting, or small scale translocation of plants to areas of suitable habitat outside of the working area. *[Note – it is considered that the risk of GCN presence is low in this area due to distance from breeding ponds.]*

3.3 In addition to the measures outlined in Table 1, the following should also be undertaken during these activities to ensure delivery of ES requirements:

- Prior to any tree works being carried out 30 x timber bat boxes will be installed into the woodland. Bat boxes will be individually numbered to allow for further monitoring. Bat boxes should be multi chamber and timber construction similar to the 'Kent' bat box design:
    - Box to be made from untreated rough-sawn timbers, c. 20mm thick. The box should be multi-chambered, rainproof and draught-free with varying crevice widths between 15 and 25 mm wide.
- A guide to positioning boxes is provide below but should be carried out under the supervision of an ecologist:



3.4 Felled timber should be used to create habitat piles, these should be positioned in suitable locations under the guidance of the scheme ecologist. This will include areas within the woodland (to discourage access off the path into the woodland) and along the edges of grassland area to provide refugia for reptiles and amphibians. Creation of standing log piles will provide additional habitat for invertebrates. Timber piles will comprise horizontal laying of timbers, use of select old/dead wood timbers and by burying timbers from felled trees vertically to a depth of approximately 50 to 60cm (timbers must be at minimum of 100 mm in diameter).

Appendix: Site Layout Plan