

1. Bareleg Moorland Hydrological Restoration Brief

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Key Contacts

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Included information:

Map 1.1 – Location map and project area

Map 1.2 – Habitat map

Map 1.3 – Archaeological features

Introduction:

Please refer to attached Map 1.1 which shows the location of Bareleg. The moorland block is part of a wider SSSI, SPA and SAC designation. The SSSI unit (182) and land holding is approximately 42ha in size. The area shown is owned by the Peak District National Authority. It is open access, unfenced and ungrazed. The site is bounded on two sides by public roads, with a good sized layby on the A53. There is no vehicular access across the works site.

Under previous ownership the moorland formed part of a wider shooting estate and a number of natural watercourses were modified to encourage drainage of the moor. Whilst these are limited in extent they continue to have an impact on the hydrological condition of the moor. Generally these have peat bottoms with well vegetated sides. The photograph below shows one of these features. This project seeks to address past drainage and also seeks opportunities to slow the flow of water and enhance the hydrological function of the blanket bog as a whole.

Site conditions

Map 1.2 shows the general distribution of habitats on the moor. This is indicative. Known water channels are shown as solid blue lines. Dashed blue lines show where additional water channels may occur but these are indicative and there may be more that are not shown on the map.

Lidar data is available for this area can be found at the link below.

<https://environment.data.gov.uk/DefraDataDownload/?Mode=survey>

Points to note which are sensitive include the diverse flush in the north of the site and the occurrence of creeping willow.

The main areas of blanket bog habitat are shown in purple. This habitat is dominated by high dwarf shrub vegetation, open canopied degenerate heather with typical associates including hare's tail cotton grass, purple moor grass, bilberry, sphagnum with more occasional common cotton grass, cowberry, crowberry, and more rarely cross leaved heath and cranberry. The peat depth varies, whilst there has not been a specific study undertaken to look at peat depth it is thought to be typically in the region of c. 50cm.

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The site forms the head waters of the Dove (to the east and south) and the Dane (to the west). The habitat map shows an indicative pattern of drainage (natural and modified).

Dry heath (yellow on the map) is largely present in the east of the site associated with higher ground and a ridge line that runs in a north to south direction, there are a few quarries here and a number of pools in the quarry floor. It tends to be dominated by degenerate/mature common heather with bilberry and Hypnum mosses underneath. Cowberry is locally abundant. There are local areas within the dry heath where the water table is higher and the vegetation tends towards wet heath with cross leaved heath, sphagnum spp, deer grass, hares tail and common cotton grass. On the map wet heath is generally shown as yellow and orange hatching.

There is small clump of Japanese knotweed in the far south of the site associated with a fly tipping incident. This has been chemically treated in the past but this area must not be disturbed by works activities. See Map 1.2.

Typical view looking northeastwards across the site showing a drain feature:



Archaeological Interest

Scheduled features

There are no scheduled monuments on this site.

Other features:

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The area underwent archaeological survey in 1986, and there are a number of known historic and archaeological features across the moorland. These largely relate to moorland intake and enclosure, communication routes, stone extraction and peat cutting (see Map 1.3).

Bareleg represents examples of drained moorland with well-preserved peat cutting. These include extensive areas of small low cuts that are difficult to define, and more compact areas of larger, deeper cuts.

There are several small and moderately sized historic sandstone quarries located on Bareleg Hill and on the ridge to the south.

Historic route ways include hollow ways that pre-date moorland enclosure, tracks leading to quarry sites, cross country routes that pre-date the establishment of the modern network of roads all of which were built by 1842.

There are the foundations for a small ruined building at the head of the Bridge Edge intake. The foundation is cut by the field boundary walls indicating that it pre-dates them. The building itself lies outside the moorland boundary but the remains of a small associated yard lies to the south of the wall and within the moorland. It is possible that this building pre-dates moorland enclosure and once stood in open moorland.

There are a number of historic drains across the moorland. These are arranged in such a way to suggest that they also serve to demark late enclosure boundaries.

To summarise, it is not expected that the works will unduly impact on these features. However, the contractor should consider the general protection of archaeological features across the site in their proposed methodology.

Restoration objectives:

This work has been identified to:

- Restore the hydrological function of the blanket bog.
- Slow the flow of water across and from the site.
- Slow the flow of water with the potential capacity to dissipate excess water across the moor and rewet adjacent ground.
- Reduce the potential for erosional pathways to develop.
- Reduce future fire risk, improve and enhance habitat resilience and condition.

It is envisaged that the majority of this work will involve installation of peat dams.

However, we expect the contractor to draw on their expertise and knowledge to identify the most appropriate methods and features to restore hydrological function. Using your experience on similar sites, best practice techniques, skill and judgement it will be your responsibility to assess and survey the site and propose methodologies to suit site conditions as necessary and deliver the proposed works.

Your tender methodology should include and detail what measures you would adopt and why, to ensure that techniques are successful at this site and are sensitive to archaeological features.

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Cost effective solutions and techniques are needed to deliver this work and a diversity of approaches may be necessary to deliver the objectives in the most cost effective and efficient manner.

Prior to tendering, a site visit should be undertaken to review the scope of works. A site officer can be made available by prior arrangement to discuss the scope of works during the week of the 14th December and 4th January. Alternatively, as the site is accessible to members of the public, a visit can be made independently. **Tenderers should indicate if a site visit has been undertaken**

The contractor is not expected to obtain SSSI consents. This will be undertaken by the landowner.

Access and machinery:

It is expected that materials brought and used at the site will be by road access. Only low ground pressure vehicles are to be used across the site. Tracking of machinery must be kept to a minimum, to prevent damage to the peat structure, using specialist machinery, bog mats etc. as necessary and in accordance with the approved methodology to be agreed. Access and egress routes must be agreed with the contract manager prior to the Works start date. Repeated tracking over the same ground must be kept to the minimum necessary to carry out the Works. Fuels may be stored at the Work Site but must be stored in a suitable, secure container and must not be located near to any open watercourse.

All machines should be serviced regularly and checked daily for oil and fuel leaks. Site spill kits should be kept on site. Where any machine is parked up overnight, it will be located as far from watercourses as practically possible. Hydraulic systems will be charged with suitable thermally stable biodegradable hydraulic oil as standard, which in the event of system rupture or leak will at least 60% biodegrade within 28 days (OECD 301B test). All appropriate risk assessments and health and safety procedures should be adhered to, at all times.

The contractor is responsible for collecting and removing all waste material from the Site in line with the Waste (England and Wales) Regulations 2011.

Timing of proposed operations

Breeding ground nesting birds are likely to be present between the main breeding period mid March – end July. Works must be programmed to take place outside this period.

It is hoped that works will be undertaken and completed by mid-March 2021 in line with funding constraints. If works progress is constrained by unforeseen circumstances e.g bad weather, the works may be extended by agreement with an absolute completion date of the 30th December 2021.

Quality checks and site visits

- The contract manager or another member of Authority staff may carry out a number of site visits to the Works to carry out quality and schedule monitoring.
- The Tenderer must satisfy itself that it possesses the necessary skill, equipment and manpower to carry out the works to the required specification at the Works Site.

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Repair of Site

Following completion of the Works the contractor shall promptly and to the contract manager's satisfaction repair any damage arising during the delivery of the Works.

Health and Safety and CDM regulations 2015

The Works are subject to the CDM Regulations 2015, see Appendix 10 and 5 for further details.

COSTINGS AND TENDER EVALUATION

The PDNPA is VAT registered so costings should exclude VAT and be fixed until end Dec 2021.

Tender evaluation

The successful tenderer will be selected based on an evaluation using the criteria set out below.

1. Price (50% of the total score value);
 - The Tenderers score for price is out a maximum score out of 50
2. Quality criteria (50% of the total score value):
 - Experience and Capability to undertake the works
 - Proposed methodology

Criteria	Weighting	Evaluation Criteria
Price	50%	$50 \times (\text{Lowest Tender Price}) / (\text{Tenderer X's Price})$
Experience and Capability to undertake the works	25%	5 x score
Proposed methodology	25%	5 x score

Supporting information

Please provide brief supporting documentation/text regarding:

Responses to the Quality Question which reflect the Quality criteria above should be provided with the Form of Tender. Responses should address the following:

- Demonstration of a clear understanding of the brief, what is required, and measures you would adopt to ensure that the proposed works are successful at this site and are sensitive to ecological and archaeological features. Explain in detail how you will undertake this work and the equipment you will use. Taking into account bad weather conditions explain how you will adapt your approach. Information to demonstrate knowledge, experience and understanding of each of the methodologies proposed.

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- Supporting information to demonstrate successful experience of working in this habitat, or similar peatland habitat, including examples of previous work

Tenders scores for Quality and Price will then be added together to produce an overall score and the Tenderer with the highest overall score will be awarded the contract.

Tenders should itemise their costs. For example where dams are proposed the total number of dams and the cost per dam should be included. Tenders should also include costs for mapping and providing digital data showing locations of constructed features. Digital data should be provided in a format compatible with Mapinfo or ESRI software.

The quote should allow for a start up meeting.

Costings should be inclusive and include provision of all labour, materials and machinery, transport, installation and any airlifting as considered necessary by the contractor and anything else required to deliver the works.

Rejected or eliminated tenders will not be scored.

Additional information:

- Risk assessments including any lone working practices;
- Welfare facilities to be provided;
- Details of any professional & public & employer liability insurance where applicable
- Company registration number (if a limited company)
- Research protocol
- Vat registration number (if applicable)

Failure to comply with any of the foregoing requirements may render a Tender liable to disqualification.

Dates

Tender return date 8th January 2021

Tender award by 15th January 2021

Completion by mid-March 2021 with potential extension by agreement to 30th Dec 2021