

SECTION 1:

Project Brief for Morridge Hill Country Peatland survey – Peat Depth Survey and Vegetation Survey (the Services)

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Key Contacts

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Map 1 – Location & Distribution of current Moorland blocks within the survey area. Different moorlands have different survey requirements as shown on Maps 1a & 1b.

Map 1a –Peat survey map

Map 1b – Vegetation survey map

Map 2 – Potential additional areas which may be included within the survey area – these will require all baseline surveys (peat depth, vegetation)

Map 3 – Indicative phase one habitat maps

Map 4 – MAGIC soil map

Map 5 – Example Peat depth map

Map 6 - Example map showing areas for sphagnum planting

Map 7 – Example map showing areas for vegetation enhancement.

Appendix A - Shows the full list of sites and associated survey types that are required. Appendix A - allows for pricing of individual/grouped moorland areas.

Appendix B – Blanket Bog - breakdown of species assemblages for blanket bog vegetation classes

Appendix 1: Form of Tender

Appendix 2: Itemised Costs

Appendix 3: Hazards Associated with the Works

Appendix 4: Tender Questionnaire

Appendix 5: Non-collusive certificate

Appendix 6: Scoring methodology

Appendix 7: Form of Contract

Appendix 8: Conditions of contract

a) Background to the Brief

We are seeking costings for completion of a suite of surveys across peatland habitats that lie within one of DEFRA's Landscape Recovery Projects called 'MorrIDGE Hill Country' and is located within the South West Peak of the Peak District National Park.

These habitats are internationally important for wildlife, and its peatlands a major carbon store and includes areas of predominately blanket bog, wet and dry heath, mires, flushes, fringing clough woodlands and willow scrub. They are crossed with primary and secondary watercourses where in places groundwater emerges on slopes and wetlands and flushes have developed. The moors are also within the Peak District Moors (South Pennine Moors Phase II) Special Protection Area (SPA) and within the South Pennine Moors Special Area of Conservation (SAC). The moors support birdlife including short eared owl, merlin and upland breeding waders such as snipe and curlew.

Gradbach, Orchard Common, Swallow moss complex, Gun Moor and Turn Edge are grazed with cattle during the late spring and summer months.

As part of the 20-30 year vision for these landscapes and associated nature recovery we require baseline survey information to inform potential enhancement works to these peatlands and provide a basis for future monitoring.

The survey area covers 1585 hectares and is mostly located within the Leek Moors SSSI, please see accompanying location Map 1 and indicative phase 1 habitat maps -Map 3 (note these do not cover all the area).

The areas shown on Map 1 require surveys that include

- peat depth survey,
- and vegetation survey.

*There are an additional number of sites that may also be included within the surveys **and instructions for these have yet to be confirmed**. Some of these are shown on the Map 2 (Merryton Low Complex). The remaining additional areas comprise four small sites which are clustered close to existing identified survey sites but are not shown for confidentiality reasons. Collectively these 'Additional Areas' comprise an additional 149ha. We are seeking costings to cover the potential full suite of sites, although these areas may not be included in the awarded contract(s).*

Some of these peatlands have already had some surveys undertaken and maps 1a and 1b show where survey is still required to complete the data set of surveys across the area. Some of the areas include habitats that may formerly have been moorland areas, for example former plantation sites such as Gib Tor Plantation and Brand Plantation and areas of rush pasture on potentially deep peat e.g near Royal Cottage. These have been included to inform the future of these areas and whether there is scope for these to be managed differently and take a different direction.

These surveys will be used to provide baseline monitoring information and inform habitat enhancement interventions which are part of a separate contract being undertaken by the Moors for the Future Partnership, which is a team operating within the Authority. Examples of the sorts of interventions that this survey will help inform include where peat may be deep enough to investigate where grips may be blocked with peat dams. Additional works could include areas for enhanced sphagnum plug planting, and areas identified for plug planting with plant species that are otherwise under represented for the vegetation type. The latter two will be informed by recommendations from this piece of work as outlined further below. (However, this element should be costed separately – see section 2) and d) further below which refer to an opportunity mapping report)

Spreadsheet 1 (**Appendix A**) shows the full list of peatland sites and associated survey types. This also shows the hectareage of each site. The Authority is seeking costings for survey of these areas.

Please note that the costing schedule at Appendix A allows for pricing of (1) individual moorland areas and (2) individual moorland sites within those areas as separate packages.

b) Scope and requirements

The location of the peatland survey area within MHC area is outlined on Map 1.

Peat depth

- **Map 1a shows which moorland blocks require peat depth survey.** Existing phase 1 survey maps (where they exist) have been provided as an indicative guide to the relative distribution of moorland vegetation type across the survey area e.g blanket bog, wet heath, dry heath. Please see Map 3. Please note that these are up to 15 years old and habitats previously mapped as dry heath may have been assigned this on the basis of vegetation type rather than peat depth. Similarly some areas of moorland e.g Merryton Low, may have been assigned blanket bog vegetation type at that time and not on the basis of peat depth. Peat depth on Merryton low is generally shallow. Additionally peat depth categorisation for blanket bog has changed over time, formerly being 50cm, current threshold being 40cm and likely to change to 30cm. Indicative peat depth coverage is also shown on Map 4. This map is derived from an external open source data set that can be viewed on MAGIC but should not be taken as definitive.
- Areas where peat depth data already exists, including associated maps and GIS files, will be supplied to the contractor. This in combination with the existing phase 1 maps will assist the contractor in producing maps for the opportunity mapping report to identify where planting could be undertaken.
- **For the purposes of this survey blanket bog should be taken as peat of 30cm or greater.**
- **Peat depth surveys are required across all the moorland habitats e.g dry and wet heath and blanket bog. Peat depth may be significant in other habitats and these are also shown within the expected surveys areas. For example, plantations over deep peat.**
- **Undertake field survey across the areas as shown on Map 1a to quantify peat depth.** For example using a peat probe. Verify as far as possible the extent of peat soils across the study area (deep peat >30 cm depth, regardless of the surface vegetation). **Where the peat depth is below 80cm record what the underlying materials are and the depth of these. This would specifically relate to quantifying any depth of clay that could be used in restoration works to supplement the depth of peat.**
- **The sampling method must follow the IUCN Peatland Code Field Protocol pages 11 to 13 (version 2 March 2023). This requires sampling locations on a 100m grid spacing. See extract below.**
- **As a general principle, sampling points should be at least every 100m but will be more frequent where significant changes occur** (e.g. areas of transition between blanket bog and dry heath) and where sites are particularly small.

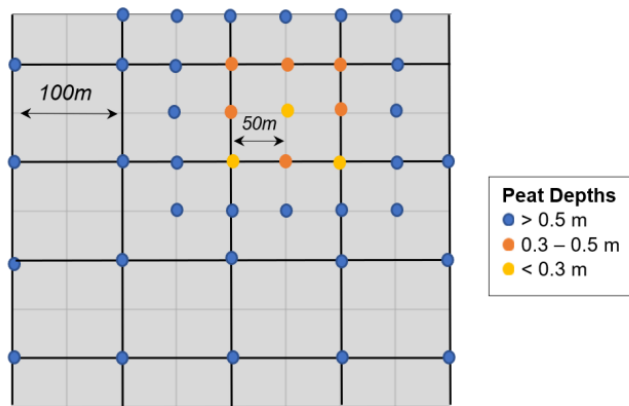


Figure 1 An example of the survey measurement frequency depending on peat depth

- **Each survey point will require its own unique identification number and recorded GPS location with peat depth information recorded in GIS format.** Supply a cross referenced spreadsheet which clearly details all peat depths measurements for every assessment site.
- **Record actual depth of materials** and according to the IUCN Peatland Code Version 2.0 March 2023.
- Within the opportunity mapping report this survey data should be used to produce maps that show actual depth as well as 'relief' peat/soil maps that categorise depths into the following:
 - a. Depth and type of underlying mineral soil
 - b. peat soils < 10cm
 - c. peat soils between 11 – 29 cm;
 - d. where peat is 30cm+ the peat depths should be ranged as 30 – 49, 50 – 74, 75-99, 100– 149; 150 – 199 etc.
- Areas where peat depth is very variable and classification boundaries between deep / shallow which cannot reliably be mapped should be identified. Such areas might be mapped as transition zones or intermediate areas but the consultant should discuss and confirm their approach to classification in advance with the MHC Biodiversity Intervention Officer.
- Within the opportunity mapping report maps should be provided that show the extent of peat depth across the survey areas. It is expected that the consultant will provide maps showing similar detail to that shown on Map 5 (taken from pg14 of the IUCN guidance). Systematic sample point locations and their associated peat depth can be seen. It is expected that the consultant will provide maps showing similar detail for the study area.

Vegetation composition and structure

- **Map 1b shows which moorland blocks require vegetation survey.**
- **Undertake field survey of vegetation** within **dry heath, wet heath** and **blanket bog** habitats and **modified bog** habitats
- **Using the same 100m grid overlay**, at each 100m grid recording point **record the vegetation percentage surface cover (aerial foliar cover) within a 4m² quadrat.** In all cases the sampling point should be representative of the vegetation in that area. Where this is off set from the 100m grid, the actual recording point of the quadrat should reflect this.
- **At each of the sampling points, as above, within a 4m² quadrat, record all the individual species that are present and their percentage cover within the quadrat (to the nearest 5%), i.e. all higher plants (to species level), non-crustose lichens (not to species level), sphagnum mosses (to species level) other mosses acrocarpous/ pleurocarpous (not required to species level).** Any area of bare peat, open water (e.g small pools) or bedrock should also be recorded.
- At each of the sample quadrats points record the structure of the vegetation. This must include:
 - ❖ **average vegetation height,**
 - ❖ **whether the vegetation is closed canopy /open canopy**
 - ❖ **the predominant life stage of the heather present–** pioneer, building, mature, degenerate

- This is needed to inform whether the vegetation is sufficiently open and that planting gaps are present within the moorland where planting can be undertaken. These would need to be located in areas where planting can thrive and be successful.
- **At each quadrat provide photographs.** This should include a downwards pointing photograph of the quadrat that is being surveyed as well as an overview photograph that points due north. These photographs should be repeatable fixed point and with an individual reference that is specific to the quadrat point. e.g Roaches Quadrat 1.
- **Where the sampling locations are in blanket bog (peat depth 30cm or greater) the following additional information should be recorded:**

Vegetation	Each Survey Node	<p>Record in order of dominance up to 3 vegetation surfaces present:</p> <ul style="list-style-type: none"> - Bare ground, ESS (Early Successional Surfaces) - Low bryophytes, lichen - Very short grass, herbs, heather - Medium grassy, building heather - Low scrub, Tussocks, mature heather - Low scrub, tussocks, degenerate heather - Young scrub < 2.5m - Mature scrub, trees > 2.5m - Tree canopy
Site classification	Each Survey Node	<p>Using the collected quadrat Vegetation and Condition information above, record the overall vegetation class of the blanket bog type (see below) at the node point e.g . Eriophorum sp. dominated bog</p> <p><i>(In the opportunity mapping report this information will be used to map the overall moorland area according to the bog type below.)</i></p> <p>The vegetation class from the list below applies where it is dominant (i.e. more than 60% of cover):</p> <ul style="list-style-type: none"> - Sphagnum sp. dominated bog - Eriophorum sp. dominated bog - Molinia caerulea dominated bog - Calluna vulgaris dominated bog - Mixed species dominated bog - Dry grass or scrub dominated bog - Short vegetation dominated fen (vegetation is ≤50cm tall on average) - Tall vegetation dominated fen (vegetation is ≥100cm tall on average) - or Scrub/tree dominated fen. <p>See Appendix B for a breakdown of species assemblages per the defined vegetation classes.</p>

- Target notes should be made of any additional species that are encountered outside of these recording points.
- **Within the Opportunity Mapping Report this information will be used to provide maps to show where areas could be planted with sphagnum.** Existing peat depth information should also be reviewed. Planting areas should indicate what species are proposed for planting, proportion and at what density. An example map is shown at Map 6.
- This should include areas which also have potential to be functioning blanket bog/wet heath habitats (e.g woodland plantations).
- **This information will also be used to provide maps to show where areas could be planted with 'missing' higher plant components relative to the vegetation type e.g wet heath, dry heath, blanket bog.** It is not expected that this would be a broad brush approach but would be bespoke to each moorland to reflect what is currently there, what is currently 'missing' with consideration to the introduction of 'rarer' components where these can be expected to thrive. For example species that will require special consideration in blanket bog habitat include bog rosemary, cloudberry, cranberry, bog asphodel, sun dew, deer grass, bearberry, creeping willow, bog myrtle. We are seeking ambitious but achievable enhancement and **species should be considered relative to the moorland type.**
- Within the Opportunity Mapping Report this information will be used to provide maps to show where areas could be planted. Planting areas should indicate what species are proposed for planting and at what density. An example map is shown at Map 7.

c) The outputs should include:

1) Peat depth and vegetation data:

Peat Depth

- **All Peat depth information as set out above. Information recorded in GIS files with relevant completed spreadsheet as appropriate.**
- **GIS files for all the recorded features. GIS files compatible with Arc GIS (Shape files)**

Vegetation

- **All recorded vegetation information as set out above. Information recorded in GIS files with relevant completed spreadsheet as appropriate.**
- **GIS files for all the recorded features. GIS files compatible with Arc GIS. (Shape files).**
- **All photographs provided in jpeg format or as otherwise agreed**

2) An Opportunity Mapping Report:

Using the data collected **briefly** describing the existing vegetative condition of each moor and prescribing and describing opportunities for restoring natural vegetation communities. This should include the following:

Peat depth maps:

- Maps for each moorland showing peat depth and overall vegetation type (see table above for bog type and example Map 5)

Proposals for sphagnum enhancement:

- **Maps showing existing sphagnum distribution** and frequency across each survey area, with annotation as appropriate.
- **Proposals and rationale for any sphagnum introduction/enhancement** (e.g. plug planting)
- **Maps for each moorland showing where sphagnum enhancement could be implemented.** To include brief details such as recommended species, relative proportions and planting rates similar to example Map 6.

Proposals for higher plant vegetation enhancement:

- **Maps showing existing vegetation composition** across each survey area, with annotation as appropriate. This should relate to the bog type recorded in the table above e.g. *Eriophorum sp.* dominated bog
- **Proposals and rationale for any vegetation introduction/enhancement (e.g. plug planting).**
- **Map for each moorland showing where vegetation enhancement could be implemented.** To include brief details such as recommended species, relative proportions and planting rates similar to example Map 7.

GIS files for all mapped outputs.

GIS files compatible with Arc GIS.

All maps provided in pdf format.

Reports provided in Microsoft word format and pdf.

- d) **The survey and opportunity mapping report should be supplied in a digital format** (to include PDF Maps) with supporting GIS files, and should include colour survey maps with suitable keys and detail, together with maps showing recommendations and opportunities for the future sustainable enhancement of the moors.

e) Access

The consultant will comply with the Authority's reasonable requirements regarding access to the survey area. Part of the survey area may not be accessible (Ministry of Defence). The consultant (including staff, subcontractors, agents or invitees) must not access such areas without prior notice and consent.

Consultants must liaise directly with landowners when accessing sites. Details of landowners will be provided at the pre-contract meeting.

f) Intellectual Property Rights

The intellectual property rights (including copyright and design) of all work, documentation, data, and materials produced for the Authority pursuant to the contract by or on behalf of the consultant will vest solely in the Authority.

g) Restricted Dates

Works may be restricted (or prohibited) on the instructions of the Authority on certain dates, which the consultant will be informed of at the pre-contract meeting.

h) Timescales

All surveys must be completed by the 30th March 2025.

All survey data will must be provided by the 7th April 2025.

All other outputs (opportunity mapping report) associated with the Brief must be **completed by 30th April 2025 (the Target Completion Date).**

i) Costings and Tender Evaluation

The PDNPA is VAT registered, costings should exclude VAT and be fixed for three months.

- In your tender return please use the spreadsheet at **Appendix A**. This should be used to price all inclusive costs for the moorland Area Groups (NW, SW, mid SW and SE (Swallow Moss Complex). and individual sites within a moorland Group Area. Please include these costings in the Form of Tender (**Appendix 1**) and **Appendix 2**.
- Provide separate costings in **Appendix A** and for those land parcels which are potential Additional Areas to the project . Please include these costings in the Form of Tender (**Appendix 1**) and **Appendix 2**.
- Please also separately price the Opportunity Mapping Report and associated mapped outputs detailed at Section C2 above. (Please note that depending on available funds this component may be omitted from the contract). These prices should be included in the Form of Tender (**Appendix 1**), **Appendix A** and **Appendix 2**.

The MHC partnership is seeking to let the contract as a whole but will also accept tender returns for packages of the moorland Area Groups, or sites within those Groups (as set out in **Appendix A**) and reserves the right to split the Services as required. The Authority is not obliged to award for individual sites or moorland Area Groups. It is anticipated that there will be costs savings where you tender for grouped moorland Area Groups.

Please provide day rates in the Form of Tender.

Tender evaluation

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

1. Price (40% of the total score value);
2. Quality criteria (60% of the total score value):
 - Experience and Capability to undertake the works
 - Proposed methodology

Criteria	Weighting	Evaluation Criteria
Price	40%	40 x (Lowest Tender Price)/(Tenderer X's Price)
Experience and Capability to undertake the works	30%	6 x score (see methodology at Appendix 6)
Proposed methodology	30%	6 x score (see methodology at Appendix 6)

Supporting information

Please provide brief supporting documentation/text regarding:

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

- Explain in detail how you will undertake this work and any equipment you will use. Please provide information to demonstrate knowledge, experience and understanding of the Brief. You should set out how you will record the necessary information and any recording templates that you will use. You should set out the most effective and efficient approach of collecting and providing this data.

- Supporting information to demonstrate successful experience of similar work, including examples of previous work.

The tender should allow for a start up meeting.

Costings must be inclusive of all costs and expenses and include provision of all elements considered necessary by the consultant to deliver the Services.

Additional information to be provided:

- Risk assessments including any lone working practices;

j) TENDER DEADLINE

Tender return deadline: **5PM THURSDAY 5TH DECEMBER 2024.**

Please see **Section 2** (Instructions on Submitting a Tender) for instructions on submission.
